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HISTORY

AND

PROGRESS

OF

PHRENOLOGY.

(Read before the Western Phrenological Society, at Buffalo,)

BY R. W. HASKINS, A. M.,

Corresponding Secretary.

"Full well we wot it happeneth unto many narrations of matters bygone, that, as some con them right eleverly, other some do so but crudely, while the thronging multitude trouble not themselves to do either the one or the other: albeit our task is, of need, ended, cre theirs can have beginning."

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PREFACE.

In each of the months of April and May, of the present year, I read, before the "Western Phrenolological Society, at Buffalo," a Lecture upon the History of Phrenology: the following pages embrace those two Lectures, with such extensions and emendations as were deemed necessary, the better to fit the whole for publication.

It is not the purpose of this work to demonstrate what phrenology is, but rather to unfold, coneisely, the history of its discovery, and its progress. To have done more would have converted this volume into a treatise upon phrenology, while of such a work there is no present want; the science having been amply developed, as far as yet perfected, in the various able works of Gall, Spurzheim, Combe, Caldwell, Grimes, and several minor authors, in

English; and of Broussais, Vimont, and some others in French; together with store of detailed knowledge that is to be met with in isolated papers, of high value, in the English, Paris, Copenhagen and American Phrenological Journals; and in the works of numerous Medical and Physiological writers.

As the entire existence of phrenology, thus far, has been one of continuedly fierce and rancorous warfare, its history must needs partake largely of the strifes and conflicts which have marked its daily progress: and because the science has finally triumphed, and become established, such history necessarily involves, in some sort, a narration of its victories; and of the manner, no less than the fact, of its enemies discomfiture, and final overthrow.

I have made free use of all accredited authorities at my command; and in all practicable instances the accustomed references and credits have been given; but still this has not, in every case, been possible, from the manner in which it sometimes became necessary to incorporate the materials into the general body of the text.

THE AUTHOR.

Buffalo, Nov. 7, 1839.

HISTORY AND PROGRESS

OF

PHRENOLOGY.

Well, says a certain class of readers, what new proofs have you to offer in support of the truths of phrenology? None, whatever, is our ready response; for none are necessary. We consider the fundamental principles of phrenology as well settled and demonstrated as are the great truths in chymistry, geology, But in this way, continues our astronomy, &c. objector, you are taking for granted the very thing at issue, while many, myself among the rest, are not yet convinced of its truth. Very well: it is the same with the other sciences; there have ever been doubters, and disbelievers, but is this the fault of the sciences themselves? Certainly not. It is but a few months since a paper was submitted to the Academy of Science, at Paris, in which the author gravely attempted to show that certain lunar observations which had been made by astronomers, simultaneously, in the

northern and southern hemispheres, were not really made upon the same moon! Well: did the astronomers of Europe thereupon bestir themselves, to prove, anew, their former demonstrations just, and this man's theory wrong? No: they left him in the enjoyment of his doubts, while they continued their investigations of nature's truths. Just so here. The evidences already before the world, of the truth of phrenology, are so numerous and clear that they generally satisfy and convince those who examine them. To these all doubting readers are referred; as a defence of phrenology, against those who withhold their assent to its truth, forms no part of our present purpose.

Mental phenomena, in some form or variety, have necessarily engaged the attention of philosophick minds, in all ages of the world; and had rational views upon the subject of mind, been imbibed at first, the history of phrenology would ascend through the ages of the past, to the very childhood of our race. But this was not so: on the contrary the wildest theories have obtained, in different ages, in relation to this subject. Without at this moment diving deeper into antiquity we may refer to the period when the intellectual faculties were divided into two classes, namely, intellect and will. The intellect was supposed to be the faculty or capacity to receive ideas, to comprehend and combine them; to judge, to reason, &c.: the will

was the faculty or capacity to be affected agreeably or disagreeably; to desire, to resolve, and to act in consequence. This distinction, irrational as it is now seen to be, was long satisfactory to a great number of the ancient philosophers. It has been ever true that dogmas which had antiquity to recommend them, were for this reason alone held in some degree sacred, and this one was thus received, in succeeding centuries: which explains why more rational views were so long delayed.

The Greeks considered ideas as furnished by the mind, and they admitted an action of the brain upon them. Plato held that ideas are all; that they constitute the entire universe; they come from God, that they are planted by him, and that they constitute the whole of the creation! Aristotle, a disciple of Plato, declared that the ideas admitted by his master are anterior to all knowledge in man; and he held they are not innate but come to us through the mind, and impress themselves upon the intelligence, which he compared to a tablet of wax, susceptible of any impression that accident or design may stamp upon it. This theory became wholly unsatisfactory; and Aristotle himself was necessitated to admit passions and griefs from without, which disturbed the regularity of his impressions upon his tablet of wax.

The Platonists became discontented: they saw that

with the same ideas all men acted not in the same manner; and they thus found, at that early day, that the whole was not yet discovered—that something was wanting in their system of mind. It may be asked, why drag forth these notions of antiquity, and present them here, in an age when they are so repulsive? But we must not forget that these notions, though now absurd enough, were long revered by the greatest men living; and if their presentation here shall cause some readers, by looking about themselves, to discover that they, too, have implicitly relied upon the truth of positions, more modern, but no less false, it is perhaps turning such material to the best possible account.

Aristotle reigned long in the schools, and was continually contradicted by the partisans for innate ideas, although he had admitted of thoughts, aptitudes and passions. It is a law of nature that men judge contradictorily, because their thoughts are involuntary and various. It ever was so, and still is the same—it arises, all other things being equal, from cerebral organization and development.

The Platonick philosophers admitted three principles of life, in man, namely, the vegetative; the animal, or sensitive; and the rational. Bacon distinguished but two; the one rational, being the source of the intellect, reason, reasoning power, imagination,

memory, inclination and will; the other sensitive, giving rise to voluntary motion and sensibility.

Descartes commenced his labours by involving everything except his own existence, in doubt and uncertainty. He did not question his own existence, "because," said he, "I think, I have ideas, I act; therefore, I am." He too, like others before him, gave the name of ideas not only to pretended representations, of exteriour objects, but also to judgement, as a natal effort.

Locke gave to ideas two origins, the understanding and reflection; but still, though he accomplished something, or rather, perhaps, much, compared to previous labourers, yet he came far enough short of a rational view of the operations of mind.

Kant recognized ideas as the representatives of the attributes of bodies, and he admits of interiour impulsions to goodness, justice, beauty, &c. Yes, interiour indeed, exclaims Broussais, "but where are these entities, in reference to our bodies? No region of nervous matter, no cavity of the viscera is designated in this nebulous system of metaphysicks; all is vague, indefinite, and diffused." Yet it was much to have said, as he did, that man is not constituted alone to learn, or to act only in virtue of what he knows, but that he conceals within him, if he did not show where, powers which communicate impulses to him.

The mental philosophers of the Scotch school, and particularly Reid, have much more directly based this philosophy upon common sense. They virtually ask, why shall we plunge ourselves into shadowy abstractions, where it is with difficulty we can maintain our identity, when it is required of us to examine the phenomena which are presented to us by mental man? What have the images of bodies in common with love or hate; or with sentiments of the beautiful, of sublimity, of justice, benevolence, &c.? Or, again, with the sentiment of veneration, or admiration? These words exist in all languages, and have been adopted by all nations; they therefore represent real impulsions, emotions, &c. These writers furthermore distinguished and signalized nearly all which Gall has located under the names of necessities and sentiments, &c.; but still they have assigned to them no organs. Many mental phenomena are not provided for, in their philosophy, nor are some important deficiencies that are met with: they have not even shown us why it is that some of our race are idiots from birth; but still they certainly have done much to bring forward mental philosophy; although it was reserved for phrenology to crown it with that degree of perfection which alone has been able to explain the diversity we see in the powers and propensities of individuals and races of the human family.

We have seen that various principles of life, and as they, perhaps, supposed, of peculiar actions, were admitted by the ancients, in different ages; and it was quite natural that in adjusting their crude systems they should have dwelt more or less upon the seat of these principles. They did do this; and framed diverse theories thereon, and also of the various uses of the brain, with and without connexion with these.

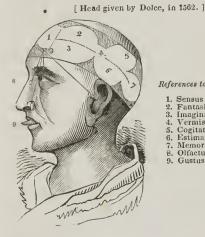
Pythagoras, five hundred years before our era, supposed the most noble of the three principles of life which he recognized, was in the head, while the other two were in the body. Much the same opinion was held by Democritus; while Plato lodged reason in the head, but the passions in the viscera. Aristotle probably held different views, at different times, in these respects. He seems at first to have adopted the idea that the brain was but a gland, which in some way ministered to the health of the blood; and Hippocrates held very much the same views. Yet, at another period Aristotle was familiar with comparative anatomy, and he makes comparisons between the brain of man and those of other animals, and remarks that the great volume of the human brain he supposes the cause of man's superiority. He even went so far, according to some authors, as to give local habitations, in the head, to common sense, imagination, judgement, reflection and memory—this last being a kind of storehouse for all the rest. These views were subsequently reproduced, sometimes literally, and at others variously modified, through a long period of succeeding time. The history of the Alexandrian school, imperfect as it is, shows much of it to have prevailed there; and the doctrines of Galen are but those of Plato and Aristotle, which had passed through this school. A work published in 1296, by a professor at Montpelier, reproduced almost entire, the opinions of Aristotle, upon this subject; and the same individual made further publications of a similar nature, in 1305. Indeed, the whole of the middle ages may be included as having entertained views of this kind.

Leaving these vague speculations, the offspring of closet theories, and which can be usefully referred to only to illustrate the necessity there ever has been for the aid of phrenological science, in mental investigations, let us turn our attention to the statuary and the paintings of antiquity. In doing this we leave the regions of fancy for matter of fact demonstration; and apply ourselves at once to view and to handle what the ancient masters themselves saw and touched. And here we find, in practical life, much that is worthy of observation. The pictures and statues of ancient, renowned men, correspond to the phrenological development requisite to the characters they

severally bear. But, says the objector, how are we to know that these pictures and statues are just - that they are not ideal creations? Very well: suppose they are? It still remains to be shown, if they were not copied or imitated from nature, how they happened to be created, by the artist, in such just conformity to our science. Many of these pieces are known to have been imaginary, for the originals of them were so; but still the result is the same. When the Greek artists attempted to represent genius, science, wisdom, &c., they always figured a large head, particularly prominent in front; and when they would pourtray museular strength, only, in which mind was no way concerned, they uniformly give us small heads. They never drew Jupiter and a gladiator with the same cerebral development. There are, however, exceptions, in ancient pieces, and reasons for these exceptions - both of which demand attention. "The ancients," says the Edinburgh Phrenological Journal, "have fallen into errours, in some of their masterpieces, which are now considered monstrous, such as the extreme smallness of the head of the Venus de Medicis. For the same cause, and for fear of failing in certain arbitrary propositions, the head of Napoleon has been reduced in size, without regard to the existence of an extraordinary cerebral development, of which phrenology, alone, is capable of comprehending the importance, and appreciating the beauty. The ancients, when they concealed the enormous size of the head of Pericles, had the same end in view as the moderns, but were more faithful imitators of nature." These errours, as they are designated, are not strictly such, since they are the result of intention. They are the productions of the devotees of fashion; and this, without citing antiquity in proof, we all see is every day making both sexes ridiculous, and often The individual whose phrenological contemptible. development has fitted him to excel as a fashionable, sacrifices, in anything, when fashion is concerned, not only propriety and present convenience, but he unhesitatingly infringes the organick laws of his being, at the cost of health, and an abridgement of his days. This, phrenologists know why to expect of such individuals; and they are therefore not surprised to see them distorting nature in a painting or a statue, to ideal proportions such as fashion may have established.

We have seen that from Aristotle downward, some vague notions of a division of the brain, and of assigning distinct offices to these divisions, have every where prevailed among philosophers. These notions seem to have formed the standard of philosophy, of the brain and mind, as before observed, through the middle ages. A tangible form was given to these

views, in 1562, by Lodovico Dolce, a Venetian, in a work upon memory, in which he has given a drawing of a head, and upon it the seat of the different faculties are marked out, somewhat in the manner of those upon a phrenological bust of the present day. Of this drawing the following is a copy.



References to the Engraving.

- 1. Sensus Communis.
- Fantasia.
- 3. Imagina.
- Vermis. 5. Cogitativa.
- 6. Estimativa
- Memorativa.
- 8. Olfactus. 9. Gustus.

Here we see the nose, tongue, eye, and ear; or smell, taste, sight and hearing, all united by lines to "common sense," in the forehead; while "fantasia," "imagina," "cogitativa," "estimativa," "memorativa," and "vermis," are severally allotted to particular parts of the head. It is unnecessary to dwell long upon these fanciful and theoretick divisions.

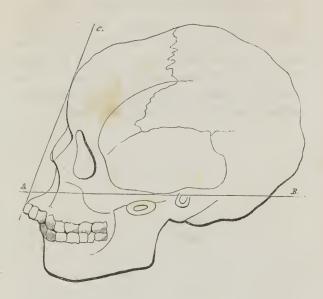
The vermiform or worm-like processes of the cerebrum, according to the dogmas of that age, served as a medium of communication by which the phantoms of the mind passed into the regions of the brain where memory was supposed to be situated; and to this feature of what was once thought sane we are indebted for that phrase, not, indeed, the most elegant or refined, namely, "he has now some new maggot in his head." The reference to "storehouse of memory," which is esteemed much higher, and readily and constantly finds a place in the pages of our novelists, and light writers, generally, is also a remnant of this "philosophy of mind."

Neglecting, as needs we must, a crowd of gleaners in these fields of fancy, we pass to Henry Home, Lord Kames. This writer, long known as the able author of several works, published, among other productions, "Sketches of the History of Man," in four volumes, octavo. The work appeared at Edinburgh, in 1774. In pursuing his investigations this author disregarded all mere authority, and discarding the method of reflecting upon the phenomena of his own consciousness, he sallied boldly out into the field of nature, in search of truth. Hence his work contains a vast accumulation of facts. Although Lord Kames did not attempt anything like a phrenological division and arrangement of the primitive faculties,

yet he has distinctly referred to, and described as original principles of thought and action, no less than twenty of those now recognised by phrenologists. He has not, indeed, given the present phrenological names to these—nor did Dr. Gall, to many of them—but he has sufficiently identified them. For instance, he often refers to "the appetite of sex," which he ascribes to organization, yet he does not call it amativeness; his "principle of malevolence" becomes destructiveness by his definition; his "sense of property," is but acquisitiveness; his "sense of cause," but causality; his "sense of symmetry," but order; and so of the rest: and he makes no mention of such individual powers as memory, or judgement.

Professor Camper, whose name is familiar to most readers, however little his works may be known, was truly eminent, for his day, both in anatomy and natural history. He was a native of Leyden, and died in 1787. The philosophick mind of this great man, though surrounded and weighed down by all the rubbish which ages of abstract theorising and neglect of careful observations had accumulated, maintained a perpetual struggle against the clouds of ignorance which then so nearly enshrouded man's mental character. He delighted in comparative anatomy, in the practice of which he convinced himself of what is since so well known, namely, that there have existed

various animals of which the species are at present extinct. Following up this subject he wrote a dissertation upon natural varieties, in which he has distinguished the varieties of the human family by the shape of the scull. His treatise upon the natural difference of features in persons of various countries; and his treatise upon beauty, have both been translated into English, by Cogan; and a copy of them, in quarto, London, 1794, with numerous plates, we have now before us. The facial angle, of which Camper is the well known inventer, is here illustrated at large. This is based upon the difference in the shape of the bones of the face of men and other animals. The jaws of brutes are more projecting than those of men; and on this relation of the jaw to the forehead, is founded Camper's theory of this angle, which will be readily understood by the following sketch.



Here, the right line A B, drawn along the base of the scull, passes across the orifice of the ear, and to the bottom of the nose, while the right line A C, extends from the roots of the upper incisors to the forehead, which it just touches. The angle opened by these two lines will be more acute the less the shape of the face, in brutes, resembles that of man. It is this angle which Camper supposed would point out the specifick differences in the heads of men and other animals; and also of the different races of men.

In some mammalia he found this angle no more than 20°; and from this it gradually rose, through the different classes of animals, and the varieties of the human family, to 85° in the scull of the European. The angle in the above sketch is 70°, which is that assigned by Camper to the Negro. The succeeding outline, from life, exhibits this angle about 85°.



By comparing with these the following scull, of one of the ape family, the principle which Camper sought to display will be fully established; the facial angle, in this instance, being no more than 42°.



This discovery, upon which so much reliance was placed at one time, and which is still by many esteemed far above its merit, was nevertheless an attempt at investigating craniological and consequently cerebral development, by observation; and therefore, however valueless in itself, was still useful in pointing attention in a direction in which knowledge might be had. That little can be known by the facial angle was long since assumed. It was readily seen that nothing of the width of the scull can be shown, in this way, either in front or rear; but it seems not to have been so evident to all that the developments of the organs at the frontal base of the brain, relatively to those in the forehead, would materially change this angle. And yet, from the situation of the parts, such

a result seems inevitable. Camper did, however, by additional lines and rules, attain the measures of sculls in several other directions, so far as to facilitate his investigations of the rules of drawing.

We have seen, above, that fashion has had some agency in distorting nature, as well in pictures and statuary as in real life. Against the arbitrary sway, at least in drawing and painting, of this invisible yet iron despot, Camper exerted all his powers - with what success, those conversant with these arts can best judge. In his chapter upon the proportions of the head, this author observes: "The portrait painters of the present day generally describe an oval upon their panel before the person to be painted sits to be drawn; make a cross in the oval, which they divide into the length of four noses, and the breadth of five eyes; and they paint the face according to these divisions, to which it must be accommodated, let the proportions themselves be ever so much at variance." But it may be said. some painters, at least, and perhaps some of the first, still make use of these or equally arbitrary rules. Very well: and is it not to this fact that we owe so many failures, and through it that we derive so many bad pietures and even unintentional caricatures, from the pencils of these men? No phrenologist, certainly, would ever thus paint; nor would one be able to judge correctly, by such a portrait, of the individual who sat

as its original. All the world has heard much of physiognomy; and there are many now, who suppose it to be nothing more than a study of the lines and contour of the eyes, and the face below; and yet they have great reliance upon a judgement formed from such data, and even suppose this to embrace the whole of phrenology. Such individuals have yet much to learn, in relation to this subject, as we shall endeavour to show in the subsequent pages of this history. Phrenologists daily see, and others may, with but little trouble, portraits of distinguished living or recent men, in which nature's conformation of head is destroyed, and the phrenological proportions that their characters respectively disclosed, are quite wanting.

From Camper we pass to Lavater—one of the most singular men of his age; and in some respects certainly one of the most anomalous of authors. His great work, namely, "Essays on Physiognomy," an English edition of which, in four volumes, octavo, translated from the French, was published in 1797, is, perhaps, one of the most extraordinary collections of fact and fable, observation and theory, acute remark and sophisticated absurdity, that has been produced within the wide range of modern research. Lavater evidently read much, reflected much; and at times he observed acutely, and reasoned clearly; but he lacked method, in all he did, which is indispensable to success

in any science; and he often unconsciously blended the wildest vagaries of caprice or fancy, with sane and important deductions. His work upon physiognomy has been but little read, at least by this nation; and when consulted it has usually been in the imperfect abridgement that is abroad, in which the four octavo volumes, with over three hundred plates, are represented by little more than the matter of an ordinary pamphlet. From such scanty materials, upon which to base an opinion, it is not singular that radically erroneous views, in relation to his sentiments and opinions, should have widely His work, for a time, was highly popular, and extensively read, in Europe; but his theory, as a whole, wanted consistency, and was founded upon no just or certain principles. Yet he was familiar with the writings of his predecessors; he had shared in their difficulties in regard to mind, and its manifestations, and had seen, with many of them, the necessity of something which they had not. Probably Camper, (who died after Lavater was forty-cight years old,) by his discovery of the facial angle, had some influence in turning his mind from the speculative theories of the ancients to the observation of facts, as they are exhibited in real life. But what is physiognomy, as taught by Lavater? This author has very generally been thought to have confined his views to the faces of men; as the nose, mouth, eyes, chin, &c., and to

have drawn from these his opinions of their mental abilities and defects; their characters, dispositions, &c. That he did treat extensively of all these, and that he placed much reliance on some of them, frequently, is true; and to this is greatly owing the fall of his system, if such it may be called. But he did not always deal thus fallaciously with his subject and with facts. On the contrary he really hit upon some important outlines of phrenology, as since demonstrated and established; and these constitute, at the present day, all that is most valuable of his work. He taught, indeed, that there is profundity in the shape of a nose, and goodness or mirth in the contour of a chin: but he did more than this: he treated the brain as the organ of the mind, and he judged of its abilities and endowments by the manifestations of its size and shape, as disclosed by the contour of the scull! This was, and still is, phrenology. following passage, which we quote from the first volume of his Physiognomy, is well worthy the consideration of our opponents of the present day:

"Who would have the temerity to maintain that Newton and Leibnitz might resemble one born an idiot, who could not walk with a steady pace, nor fix his eye, nor conceive, nor express, reasonably, the plainest abstract proposition? What wretched reasoning, to advance, that one of these great men con-

ceived the Theodicea in a misshapen brain like that of a Laplander! and that the other balanced the planets and divided the rays of the sun, in a head resembling that of an Esquimaux, whose shallow intellects can reckon no farther than six, and declares all beyond it innumerable!"

From the brain we proceed to sculls, of which Lavater has given numerous drawings; and upon all these he has bestowed detailed observations and descriptions. His fourteenth lecture is headed "the human scull minutely considered," and commences thus: "The scull, that part of the human body which is of the most importance to study, authors and observers who have preceded me in the physiognomical carreer, seem to have paid only a slight degree of attention to. No one is more interesting or more significant to an attentive observer. The knowledge of this part is the most solid foundation of that of man." Again: "The scull, which by degrees acquires so great a solidity, is, in infants, soft and flexible the cavity of the scull is visibly fitted to the mass of the substances which it contains, and follows their growth at every age of human life. Thus the exteriour form of the brain, which imprints itself perfectly on the internal surface of the scull, is, at the same time, the model of the contours of the exteriour surface." . . . "On the surface of the scull

chiefly are to be found distinct marks of the manner of life, followed by the party to whom it belonged." In conclusion of this lecture he observes: "I shall finish this article by mentioning an historical trait known to the whole world. There were found, formerly, on the field of battle, the bones which remained there many years after the combat, and the distinction was even then sensible between the sculls of the effeminate Mede and the warlike Persian. The same thing has, I believe, been said of the Swiss and Burgundians; and this will prove, at least, that it has been deemed possible to discover, simply by the inspection of the seull, the difference of the manner of life, and that of the several powers of different nations, and to distinguish one people from another."

In pursuance of these and similar views repeatedly expressed by him elsewhere, Lavater has given no less than thirty drawings of human sculls, besides those of monkeys and various lower animals, illustrated by extensive criticisms and explanations of their various shapes, sizes, &c., and the characteristick features of mental powers and propensities thereby portrayed.

The opinion, as we have seen, is extensively abroad, namely, that Lavater's views and estimates of men's characters, abilities, &c., were drawn from the contour and lines of the *face*. As before observed, he did

often dwell, in detail, upon these; but yet they were far from being his ehief reliance, as has been shown by quotations from his own pen. It is true that in very strongly marked eases, phrenologically, the individuals thus developed will have, in some degree, the natural language of the predominant organs depieted in the expressions of the countenance. And there are eertain of the organs, also, as alimentiveness, and language, for instance, which when greatly developed, exercise an influence upon the actual form of the face itself. But still, the dependence that can be placed upon the face, as an index of either character or mental ability, is very little-less, indeed, by far, than most persons are willing, before strict investigation, to admit. That Lavater did not form correct opinions of men by the indications of their faces, because he could not, if he would, may very readily be learned by an examination of the following cut. Here we have the portrait of Dr. Franklin, which has been selected on account of his well known character, no less than from the fact that the portrait is itself familiar as the face of a friend, to almost the whole nation. All eoneur in saying that the portrait of Franklin exhibits strong marks of a powerful mind; of wisdom, thought, decision, &c., as is usually remarked of it: in short, no one ever supposes it the portrait of a weak, simple, or subordinate individual.



Very well: now, by means of the fly sheet, let the head, only, of the portrait be covered, leaving, it will be observed, every portion of the face entirely the same as before, but surmounting it with a new head, of a different form and size; and how changed! The "intelligent countenance," as it was called, is no more; the marks of decision and of wisdom, where are they? They are gone; and notwithstanding the

same face is still there, yet this would be instantly recognised as the portrait of a simple, submissive, weak man; an humble obeyer of others, but the leader of no one. It is the head, then, and not the face, by which we all judge and estimate a stranger, upon his first presentation. It is by phrenology, in fact, though without the name, and for the most part without the valuable details that are furnished by that science.

We might enlarge, to very great extent, our quotations from this author, in further illustration of his phrenological views; but this seems unnecessary. We have shown enough to prove all we attempted—all we claim for Lavater—namely, that he saw some glimmerings of truth, in his long wanderings amid confusion and darkness; that his voyagings frequently brought him in sight of the sought for coast, and that he often looked steadfastly thereon, but still failed to recognise it as the realm he so anxiously hoped to discover. He saw that the *size* and *form* of the brain dictated and controlled mental phenomena; but the idea of particular organs therein seems never to have occurred to him.

We have traced this hurried outline of the dim and shadowy dreamings of men in past ages, upon the nature and methods of their own minds, not, indeed, to constitute it a finished picture of what has been or

what still is dignified with the name of mental philosophy, but only to illustrate the urgent necessity which was constantly felt, from the earliest history of our race to the day that phrenology was announced to the world, of something rational and satisfactory. in explanation of mental phenomena. Through all former time, while century after century rolled on, families and nations were born and buried; empires and republicks rose, flourished, fell, and were forgotten; brute force often bore sway, until low craftiness dethroned it, while high and noble intellectual combinations pushed this aside in its turn, and still man knew not himself; and the whole philosophy of mind was yet but some mystical chimera of the schoolmen-an ignis fatuus of the cloister, or the solemn toy of some Diogenes in his tub, carefully shunning observation and building theories by torch-light! *

^{*} While preparing these pages for the press, our attention was invited to a new work, namely, "The Young Lady's Home," by Mrs. Louisa C. Tuthill, first published since the commencement of the present year. The remarks of this authoress upon mental culture, memory, imagination and judgement, were particularly recommended to us as valuable. Had Mrs. Tuthill understood phrenology, as, for her own reputation, she should have done, before writing upon the subjects above enumerated, she would have known that some of the views she has given to her readers, though once deemed mental philosophy, have no longer any claim to rationality.

But we have now arrived at a period when this could no longer satisfy: when man, having rendered himself practical by discoveries and applications in the other sciences, became at length anxious for some rational views of the mind. Yet this want was not supplied by midnight vigils and painful theorizing; no: accident first pointed the way for man to read himself; and the first link in the chain of discoveries which now enables him to do so, was forged by a child! But this child did not owe all to accident - nor do we. The accidental hint, in childhood, he pursued in all his after life; and by so doing he arrived at the signal distinction, in common with almost all great discoverers, and human benefactors, not forgetting our own lamented worthies, Fulton and Clinton, of being jeered, contemned, scoffed at, and persecuted, for

For instance, Mrs. T. relates some well known and striking historical instances of the exercise of verbal memory, such as repeating a whole poem, after reading it, &c., upon which she remarks as follows: "It is impossible for us now to discover whether these efforts were owing to a naturally strong memory, which had been habitually exercised, or to an artificial memory; probably to the former." Now, cases of this kind are but manifestations of extraordinary development of the organ of language; and far are they from being impossible to be understood: on the contrary, any good phrenologist, after spending fifteen minutes in Mrs. Tuthill's presence, would decide, with perfect certainty, whether or not she possessed the ability thus readily to retain and repeat words.

having disclosed scientifick truths so important — so vast that, although he has but just left us, we already begin to appreciate, in his labours, what posterity is to adore.

The individual thus fortunate and thus distinguished, was Frangois Joseph Gall, who is the father of phrenology, strictly speaking. He was a native of Suabia, and was born in 1757. At the age of nine years, as he himself states, he was placed, with another boy, under the tuition of an uncle, and while with him was often reprimanded for his inability to compete with his companion in learning by rote, although in other respects he greatly excelled him. The two boys were subsequently sent to school at Bade, where thirty boys attended, several of whom committed to memory with such facility that, although they stood at the eighth or tenth place in other exercises, in this they rose to the highest. Two of the thirty even excelled Gall's first companion; and he was struck at the coincidence of all of them having eyes so prominent as to have given rise to the nick-name, bull's eyes. He was subsequently transferred to another school, and again lost his places by inability to compete with other boys at verbal recitation; and here, too, he observed the projecting eyes of those who excelled him in this exercise. At a later period he again suffered defeat, in the same way, at the college of Strasburgh, and by

youths whose eyes exhibited the same kind of prominence. Many of these who thus excelled, he found had very moderate ability for any other kind of learning. Having observed thus far, the idea very naturally arose in his mind, that prominent eyes were an indication of a good verbal memory - and here was the beginning of phrenological discovery. Gall built not a theory in his closet, and then sallied out to seek proofs of its truth; for at nine years old none will say he could have done so; but he detected the fact in nature: a fact which, however often observed; had never before been applied to any useful purpose; and he ever found it coupled with a peculiar manifestation of mind. Reflecting upon this he very naturally inferred that if there was an external indication of one mental talent, there might be such indications for the others; and from that moment, all those who were remarkable for any particular talent became objects of his most especial attention. He now entered upon the study of medicine. This, of all professions, was best calculated to aid him in his new researches, not only by outward observations, in connexion with mental manifestations, but also in extending his researches to the brain itself, by examination after death. In his new character of professional student, Gall's first attention was very naturally turned to the brain, in the hope of acquiring a knowledge of its functions; but he was doomed to severe mortification, upon finding the whole question involved in the conjectures and obseuritics which two thousand years of theorizing had not removed. Having, however, ascertained certain talents and dispositions always to accompany unusual size of certain parts of this organ, the brain, he still hoped that, by a long course of observation in every situation in which man is to be found, farther disclosures might be added to the number, until at last the functions of every part of the brain might become known, and the most important results be obtained in a department of science of all others the most interesting. With this view, and in this exalted hope, Gall devoted himself to the study and observation of human nature, with a zeal, ability and patient perseverance previously unknown; and, ultimately, with the happicst results. It is impossible to read his works without a feeling of admiration for the extent, variety and nature of his researches, both in the study of man, and in that of the lower animals. Nothing seems to have escaped his notice - nothing to have slackened his efforts. Little, indeed, did those who lavishly bestowed upon him the epithets "reekless theorist," "visionary dreamer," and a multitude of kindred detractions, suspect the figure they will make with posterity; to whom they will in this way become known, indeed, but only as the enemies of the true science of mind.

We have already shown how phrenology began how its first discovery arose from accident; and as the subsequent labours of Dr. Gall were all equally based upon observation, we shall enter upon a condensed history of his discoveries of the several organs he established, in the order in which he has arranged them, in his works. The names originally adopted by Dr. Gall, for the organs, have been most of them changed; Dr. Spurzheim having bestowed upon them those by which they are now generally designated. To illustrate this historical fact we shall give to each organ, in the following list, first a translation from the French, of Dr. Gall's name for it; and then add that bestowed by Spurzheim, and by which it is now generally known. We preserve Dr. Gall's order of arrangement, although that is not the order in which the organs were discovered.

1st. Instinct of Generation — Amativeness. Before Dr. Gall had suspected this organ to exist in the brain it was disclosed to him by accident. In supporting the head of a patient in convulsions, he was struck with the extraordinary size and heat of the region of this organ; and from a knowledge of the character of the patient he was induced to institute a course of observations, which resulted in establishing the organ.

2d. Love of Offspring — Philoprogenitiveness. In comparing the various forms of the head, Dr. Gall

remarked that the female scull was generally much more prominent, at the region of this organ, than that of the male; and having previously ascertained that different faculties were eonneeted with different parts of the brain, he naturally supposed that this must be the organ of a faculty possessed in a greater degree by females than by males; but it was long before he knew its nature or office. During several years he adopted and abandoned successive opinions, as testimony seemed to preponderate for or against each in turn. He had noticed that this part of the head was generally more largely developed in female monkeys than in other animals, and this led him to reflect upon what quality of mind that could be which the females of the human family and of the monkey tribes both possessed in a more remarkable degree than other animals. Pursuing the hint thus furnished him he eventually succeeded in affixing to this organ its true eharacter and office.

3d. Attachment, friendship — Adhesiveness. Dr. Gall knew a lady so remarkable for her friendship that he was induced to take a east of her head. This east exhibited great development at the seat of this organ, which immediately became the object of Gall's investigation. He was constantly told, by those who knew this lady better than himself, that she was remarkable for nothing but her unvarying constancy in

friendship. Her fortune had changed from wealth to poverty, and from poverty to wealth, while her friendship knew no change. Here, then, was a *probable* explanation of the character of the organ—and subsequent investigations converted that probability into certainty.

4th. Instinct of the defence of one's self and one's property - Combativeness. In order to judge of what qualities of mind the populace was most susceptible, Dr. Gall assembled, at his house, a number of the lower order of persons, as porters, coachmen, &c., to whom he distributed refreshments and money until he had gained their confidence, and he then invited each to state what he knew of the good or bad qualities of the others. He was astonished at the interest this excited in all those who were reputed quarrelsome and disputatious. Those most fond of quarrels spoke with much contempt of the cowardice of others. On examining the heads of the former, as compared with the latter, the only uniform result was, that all the quarrellers were full, upon the head, in the seat of this organ, while the others, that were called cowards, were deficient in such fullness at that part. He then extended his observations, and examined the heads of those who were remarkable for courage, including some of his old school-fellows, who were prone to excite fights, and to take a lead in them; and in all

these he found the heads uniformly full at this part, although, in most of the other parts there might be, and often was, much disagreement. In this way he pursued the investigation, until there no longer remained any doubt as to the office of this part of the brain.

5th. Carniverous instinct, disposition to murder— Destructiveness. Dr. Gall, in comparing the sculls of animals, found a marked and constant difference between those of the carniverous and other classes of animals. Ranging the sculls of several different classes before him he found that those of the carniverous animals were always much more fully developed, and swelling, at the seat of this organ, than any of the others. This showed him, distinctly, a development of brain in a certain region of the head of carniverous animals, which did not exist in other races; and with this hint he proceeded to examine the heads of men. He had the scull of a parricide, that had been sent him, and which he had laid aside, without much attention, as he could not suppose the scull of a murderer could be serviceable to him. But about the period in question, another, being the scull of a highwayman, was forwarded to him. The former possessor of this scull, not contented with robbing, had committed several murders. These two sculls Dr. Gall placed side by side, and carefully inspected; and he was

struck with the fact that, although they differed greatly in other respects, yet they agreed in this, that they both had a full, swelling surface at the same part where he had noticed that form in the carniverous animals. This did not carry the appearance of accident; and Dr. Gall consequently began to apply the discovery he had made to other objects, both of the human and the lower animals, to determine, if possible, whether there was any connexion between this conformation and a disposition to kill. He says, "at first the idea was revolting, but, when the object is to observe, and to recount the result of my observations, I recognise no law but that of truth." But upon strict inquiry he found cases so extreme as to justify his suspicions. He relates the case of an apothecary's boy who so delighted to kill, that he sought the profession of hangman; of a merchant, who for the same reason, took up the trade of a butcher; and of a rich Dutchman who used to hire the butchers to let him kill their cattle, that he might see the blood flow. The Chevalier Selwyn, he relates, made particular exertions to be placed close beside criminals who were undergoing barbarous punishments; and he recounts this anecdote of Lacondamine, that he had become so noted in this line that once, at a publick execution, when making his way through the crowd, and being stopped by the soldiers, the executioner said, pleasantly, to the military, oh, let that gentleman pass, he is an amateur! With these and a multitude of other cases, not less revolting, before him, he named this the organ of murder. The name, as the reader will hereafter see, was indeed erroneous enough, although no organ of the head is better established.

6th. Stratagem, finesse, - Secretiveness. In his boyhood Dr. Gall was struck with the character and form of head of one of his companions, who, with many excellent qualities, was noted for his cunning and deceit. His head was very broad in the region of this organ. He was a warm friend; but his expression of cunning was precisely like that of the cat, when watching to deceive her prey. Another, who, at first sight appeared the picture of candour, was trusted by no one; he was false, perfidious, and perjured; decciving his friends, instructers and parents. He carricd his head like the other, and like his, this head was exceedingly broad in the same region. In after life a patient of Dr. Gall's who was thought to be a very worthy man, presented the same remarkable width in that region of the head. At his death, soon after, Dr. Gall learned that he had cheated all his acquaintances, and even his mother, out of considerable sums of moncy. He also found that a physician, an able man, at Vienna, had so much of this development and the accompanying manifestation, that the police authorities gave publick notice to beware of him. This man declared to Dr. Gall that he knew no delight equal to that of deceiving those who distrusted him most. From his character, and the shape of his head, which was the same as the others, in the region of this organ, Dr. Gall suspected he had discovered the organ in question; and he continued his observations until no doubt remained upon the subject.

7th. Passion for, or sentiment of, property; propensity to steal - Acquisitiveness. Among the porters and other low persons whom, as we have seen, Dr. Gall assembled at his house, with the view of studying their manifestations, a great number, many of them boys, openly accused themselves of pilfering; and some were so proud of the act that they boasted of it. What struck Dr. Gall as most singular in these exhibitions was, that some of the individuals assembled looked with perfect horrour upon these boasters, and preferred hunger to stealing, or even to partaking of provisions stolen by others. He wished to solve this singular enigma, as it then appeared, and for that purpose he assembled a great number and divided them into three classes: 1st, the thieves; 2d, those who abhorred thieving; 3d, those who appeared indifferent upon this point. He carefully examined and compared their heads, and was surprised with the discovery of a rising or prominence in the situation of this organ, in

the first class; while in the second it was either flat or depressed. In the third it varied, but still was never so prominent as in the first. He repeated this experiment upon different assemblages, and with the same result; and from this he very naturally inferred that there might be an organ for the love of property, and that he had thus discovered it — which subsequent and vastly numerous observations have wholly confirmed. Of course it will be seen that the cases here cited, by means of which Dr. Gall made his discovery, are those of the abuse of this organ; and hence the impropriety of his original name for it.

8th. Pride, hauteur, loftiness of feeling—Selfesteem. When reflecting upon the causes of mendicity, Dr. Gall at one time imagined he had discovered the real one in carclessness and want of foresight. At this time he took a cast of the head of a young beggar, and found, as he expected, the organ of cautiousness very small; but upon farther inspection he found a large projection in the region of this organ. Here was a hint: he questioned the young man, and learned that he was the son of a rich merchant; but, being too proud to attend to business, he had sunk to the condition of a beggar: yet even then he could not make up his mind to work. Dr. Gall somewhat doubted so strange a story; but it had the effect to direct his attention to the part of the brain in question. He called

to mind a relation of his own who manifested a similar disposition; looking with contempt upon all useful occupations. He also noticed the same thing in a prinee at Vienna, who was notorious for his ridiculous pride in gait and manners, and for a constant reference to his ancestors, in conversation. This prince being bald, Dr. Gall had no difficulty in perceiving a prominence upon his head, at the part where he had noticed it in the beggar. Hence a well-grounded suspicion arose, that the feeling of pride was a primitive faculty, dependent upon its own peculiar organ; nor was he long in confirming the truth of this suspicion.

9th. Vanity, ambition, love of glory — Love of approbation. Being physician to a lunatick asylum, Dr. Gall was one day occupied in verifying the truth of his discovery of the organ of self-esteem, when he met with a woman who believed herself queen of France. Here, then, he expected to find the organ of self-esteem very large; but instead of this he found a depression there, and an evident rising upon either side of it. Of the nature of the functions of those regions of the brain here discovered to be elevated, Dr. Gall as yet knew nothing; and the condition in which he found this woman's head sorely puzzled him. But, taking his facts as he found them, and pursuing the subject, he was not long in discovering that this peculiar state of lunaey was quite different from that of

persons insane from pride. The latter are serious, calm, imperious, arrogant; and always affect a dignified majesty. All their expressions, he noticed, bore the stamp of the feeling of power and dominion over others: while those in the former state of mind he found quite different. They had an inordinate vanity, and would address you with the most polite and affectionate attentions, and impress you, if possible, with an idea of their high birth or riches, and often bestow voluntary promises of wealth or honours. The proud man, on the contrary, full of his own merit, regards all other mortals with contempt or indifference; while the vain one thinks the approval of others of the first importance. The proud man waits to be sought for, while the vain one knocks at every door, under some pretence, as if he feared he might be forgotten. These and similar contrasts led to such farther observations as demonstrated the existence of this organ, and fixed its place upon the scull.

10th. Circumspection, foresight — Cautiousness. Dr. Gall knew, at Vienna, a man of superiour mind, who could never go straight forward with what he had to say. He continually stopped, and began anew, as if not sure he was right, so that he exhausted the patience of all with whom he conversed. In his actions it was ever the same: he prepared, with numberless precautions, for the most unimportant interview or occurrence.

Dr. Gall noticed the great width of his head near the top, when viewed from behind, and compared it with one whom he knew, and whom he saw sitting beside the first, with a like enlargement at that part of the head. These two men he found generally unlike each other in every thing but in this single point, while here they agreed. Upon this coincidence Dr. Gall based his first opinion that irresolution, hesitancy or indecision might have its organ here; and upon farther observation so it proved.

11th. Memory of things, memory of facts, sense of things, educability, perfectibility - Eventuality. After Dr. Gall had discovered the organ by which individuals learn by rote, he soon distinguished that this sign by no means indicated every kind of memory. Among his school-fellows some easily remembered words, sometimes without a knowledge of their meaning, others were remarkable for the want of this power, and yet had a strong memory of facts and events. Some, too, had a talent for remembering places, and for leading the way through strange paths; others could repeat, without errour, a piece of musick they had heard but once; while others, again, could not do this, but yet retained numbers and dates well: but he found no one who had all these powers combined in himself. He afterwards learned that others had made the same observation before him; and that they had

distinguished three kinds of memory, namely, of things, of places, and of words. He found many persons who, without being profound, had still a general knowledge of things or events, and such he saw were full in the middle of the lower part of the forehead—including individuality, (which he did not discover,) with the organ in question, and which he so anomalously named.

12th. Sense of locality, sense of the relations of place - Locality. Dr. Gall's fondness for natural history led him often to the woods in search of birds' nests, and to place snares, &c., in all which he succeeded very well; but it was hardly possible for him to return to his nets, or to find the place where he had left them, after a day or two had elapsed. So much was he troubled in this way that he finally had to engage the assistance of one who never lost his way, but could return to each desired spot, though there might be many of them, without effort, and without hesitation. When Gall asked him how he could thus remember? he could only reply by expressing his surprise that any one could fail to do so. This did not explain the phenomenon; so Dr. Gall took a cast of his head, and waited farther observations upon those who possessed the same talent. The great landscape painter, Schænberger, told Dr. Gall that he only took an outline of his pictures from nature, and that his

memory never failed to serve him for the filling up, even to the individual trees. Two other men he soon after met who had this power; and of the heads of all three of these he took casts. On comparing these several casts, although they were very different in other respects, yet at the point where this organ is located, he found them all large and full. This gave him the idea that this quality depended upon a primitive power of the mind; and he very soon after verified the fact, by observations upon dogs and other subordinate animals, as well as upon man himself.

13th. Power of distinguishing and recollecting persons - Configuration. This organ was so small in Dr. Gall that he had great difficulty even in remembering persons who had sat beside him at table, or those to whom he had the same day been introduced. No effort ever enabled him to overcome this defect; and while he saw some who encountered no such difficulties, others fell under his observation who were nearly as much perplexed, in this particular, as himself. He could not blame his eyes, for these he knew to be good; nor was it a want of exercise; for one of the chief occupations of his life had then been the study of the qualities of bodies. Among animals he found as great a difference prevailing, in this respect, as in men. The bee knows every individual of its own family or hive, although these sometimes number

as high as 80,000. Dogs, also, differ very much in this respect. These facts led him to suspect that the power depended upon a primitive faculty; the organ of which he finally discovered, after a protracted and most laborious course of observations.

14th. Sense of words, sense of names, memory of words, verbal memory—Language. This organ was the first, in point of time, that was discovered, and it thus lead to the disclosure of others. Of the manner of its discovery we have already spoken.

15th. Faculty of spoken language; talent of philology, &c. This, by Dr. Gall, was treated as a separate organ; but all phrenologists now reject such division, and include this in the organ of Language.

16th Faculty of distinguishing the relation of colours; talent for painting—Colouring. The fact that some persons are incapable of perceiving the different shades of colours, while others have a natural tact in distinguishing the most delicate tints, is so common that it could not long escape such an inquirer as Dr. Gall. Finding that this quality was in no degree proportioned to the power of perceiving the other properties of matter, he was induced to pay attention to the development of those who were remarkable either for this power or the want of it, and to endeavour to analyze, by observation, the different talents proper to a painter, especially those distinguished for colouring.

In all such he remarked a prominence in the situation of this organ. At this time Dr. Gall had no knowledge of the structure of the brain. Travelling, afterwards, with Dr. Spurzheim, they every where found their previous observations confirmed; and at Augsburg they were surprised to find a book-seller of that town, born blind, who maintained that it was not the eye but the intellect which recognised and compared colours; and he declared he was able to form a notion of the primitive colours. Continuing observations, the organ was at length well established.

17th. Sense of the relations of tones; musical talent - Tune. A little girl of only five years old was brought to Dr. Gall for examination, as she had a remarkable talent. Seeing nothing which, as he then understood the subject, indicated a great memory, he told her friends so. They replied, then his discovery of the organ of memory must be erroneous, since this child had a most unusual memory for musick. Dr. Gall then inquired if she had a good verbal memory, and was answered that she had not: that her memory was extraordinary only in regard to musick. From this hint he was led to infer there were different kinds of memory. He then sought out other persons, noted for this same excellent memory of musical sounds, and carefully examined and compared their heads. Those he first encountered chanced to

have the upper part of the forehead narrow and the middle very broad, giving it a kind of conical form. Finding several in this way, he suspected that it was this shaped forchead which indicated the talent in question; but he subsequently was undeceived, by meeting several, in his researches, who were great musicians, and yet had the top of the forehead broad, as well as the base. At Vienna, where musicians are very numerous, he procured many casts; and on comparing these, as was his custom, in order to discover in what particular part they would all agree, however much they might differ in all others, he found a part in which they were all prominent. He then sought out numbers of those who were remarkably deficient in the talent in question, and in all these he found this same part of the head depressed: and thus was located and established the organ of tune.

18th. Sense of the relation of numbers — Calculation. At St. Polten, near Vienna, there was a scholar who was much talked of, for his great powers of calculation, in numbers, although he was the son of a common smith, and quite uneducated. Dr. Gall sought him out, brought him to Vienna, and exhibited him to his class. This excited some attention, in the inhabitants, and in a few days an advocate called upon Dr. Gall, to detail and lament his son's fondness for arithmetick, which he said so wholly absorbed the child's

attention, that he would not even indulge himself in play. On comparing the two, the only resemblance he could discover was in the region of this organ. He then sought for men distinguished for this talent; men whose delight it was to deal in arithmetical puzzles, and questions of numerical intricacy; and although some of these were men of very moderate abilities in everything else, yet in them all he found the same dcvelopment in the part in question. One of these was the Baron de Vega, author of a set of tables of logarithms. From publick men Dr. Gall turned, first to families, and subsequently to large schools, in search of evidence upon the point in question; and finding every where the same results, namely, this part prominent in all those who excelled in arithmetick, and retreating in all who could not thus excel, he established the organ of calculation, or number.

19th. Mechanical talent; sense of construction; talent of architecture — Constructiveness. When Dr. Gall first turned his attention to the talent for construction, as manifested by many individuals, he had not discovered the fact that every primitive faculty is connected with a particular part of the brain, as its organ; and consequently he directed his attention, in this case, to the whole head of great mechanicks, instead of any particular part. He was frequently struck with the circumstance, that the heads of these artists were as

large in the temporal regions as at the check bones. This, however, was not true in every instance, and therefore he was gradually led to believe that the talent depended upon a particular power. To determine this point, he made acquaintance with men of distinguished mechanical genius, wherever he could do so; took easts of their heads, and studied and compared them. In these he soon noticed that, at the present seat of this organ, they were all largely developed, though they agreed, uniformly, no where else. From this hint Dr. Gall pursued his investigations farther; and at Vienna a man was brought to him, concerning whose talents his opinion was required. Dr. Gall stated that the individual ought to have a great tendency towards mechanicks. In this he was declared, by the gentlemen who conducted the person to him, to be mistaken; but the individual, himself, who proved to be the famous painter, Unterberger, defended Dr. Gall's opinion. He declared that he had ever had a strong passion for the mechanick arts, and that he only painted for a livelihood. In proof of this, he took the party to his house, where he showed them a multitude of machines and instruments, some of which he had improved, while others were wholly of his own invention. The same talent, also, exhibited itself in his profession, in the construction of his designs. Farther

research brought additional confirmation; and hor found, wherever he went, this part of the head developed in mechanicians, architects, designers, sculptors, &c., in due proportion to the skill they respectively manifested, until he satisfactorily and fully established the organ.

20th. Comparative sagacity - Comparison. Gall often conversed, upon philosophical subjects, with a man of great talent; and he observed that whenever the latter was at a loss to make himself understood, he always had recourse to comparison. Seeing this a characteristick of his mind, the Doctor examined his head. He had already advanced so far in his discoveries as to know that, being an intellectual faculty, it probably had its seat in the forehead, and not among what he designated the sentiments or the propensities. In the head of the gentleman in question he remarked a large rising in the upper region of the forehead. Seeking others who were remarkable for this quality, he uniformly found the same fulness upon their heads, at the same part. Among others were two jesuits, remarkable for the clearness with which they illustrated their subject while preaching, by means of comparisons and allegories, and in both these the part in question was greatly prominent. Dr. Gall continued to inquire and observe, in all circles to which he had access, and among every class, until there no longer remained any doubt, either of the position or the office of this organ.

21st. Metaphysical depth or power of thought; power of drawing conclusions - Causality. Dr. Gall had long remarked, that those men who were known for strong philosophical or reasoning powers, had the upper part of the forehead very prominent. Such were Socrates, Cicero, Bacon, Montaigne, Galileo, Leibnitz, Diderot, &c. The genius of these men divides itself into two kinds. One set studies the material world, and makes observation the base of all its speculations: the other studies the spiritual world, without deigning to look at the laws of matter. In these last, Dr. Gall observed the part upon each side of comparison largely developed. He verified the nature of the function of this part, by studying the manifestations of the followers of Kant, who were men distinguished for intellectual power. He found those parts extremely large in Kant, himself; in Fichte, Schelling, and men of that class; and thus he soon ascertained, beyond all doubt, the nature of the faculty here indicated.

22d. Causticity; wit—Mirthfulness. This, it is, perhaps, quite impossible strictly to define, in words. Dr. Gall says of it, I see no better means than to cite men whose dominant faculty was what I suppose this

to be; such as Lucian, the Voltaire of the Greeks, both by his boldness and by the turn of his mind; Rabclais, Cervantes, Marot, Boileau, Racine, Regnier, Swift, Sterne, Voltaire, Piron, Rabener, Wieland, &c. In the heads and busts of these, and all others, thus gifted, in whose cases Dr. Gall had an opportunity of learning the fact, he found the part which is the seat of this organ, fully, and in most cases, largely developed. It was much easier to establish in the brain, the seat of this power, than it is, now that is accomplished, to define it, satisfactorily, by language, alone—so versatile is the power, and so multifariously may it constantly combine with others, in its manifestations.

23d. Poetick talent — Ideality. Dr. Gall says he first observed this organ large upon a poet, who was a friend of his, and who had little else to recommend him to distinction. He then observed the form of Ovid's head, which he found large at the seat of this organ; and the same proved true of other noted poets. This raised a strong suspicion, and led to a more general application of the test to living examples. After many individual examinations, all of which resulted in confirming his previous views, Dr. Gall, when at Berlin, was invited, with Dr. Spurzheim, to visit a collection of some thirty busts of poets. In all these busts they found this region prominent; in some more than in others, just in proportion to the greater

or less poetick talent of each. Observations were continued long after this, before the organ was treated as established; but at length, the number of these having become so great as to remove all room for doubt or question upon the subject, the organ was admitted as fully established.

24th. Goodness, benevolence, gentleness - Benevolence. Dr. Gall was once requested, by a friend, to take a cast of his servant's head, as he was a most extraordinary model of benevolence and good feeling, although brought up among a very worthless class. Up to this period Dr. Gall had no suspicion that "goodness of heart," as it was called, had any connexion with the brain. He took the cast, however; and also that of another person whom he knew, and who always kept the least share of anything for himself, being happier at seeing others enjoy it than if he received the whole. Towards him his relations so conducted as to excite any feeling rather than that of charity; but still, this treatment did not abate the activity of his benevolence. A third remarkable case of this kind, soon after falling under Dr. Gall's observation, he secured a cast of this individual's head; and upon comparing the three easts, although they agreed generally, in nothing else, yet in the region of this organ they were all greatly prominent. Dr. Gall then sought, in schools and private families, for cases of similar character, and also for those who manifested the opposite disposition; and in all these cases he uniformly found the strongest confirmation of his views. Not willing to rest here, he pursued the subject still farther, and among the animals lower than man he found the same truth illustrated. These observations were continued until no doubt remained, either as to the position of this organ upon the head, or the functions it is destined to perform.

25th. Faculty of imitation; mimickry - Imitation. Dr. Gall had his attention called, by one of his friends, to a remarkable rising upon his head, which the Dr. had not hitherto observed in any one. The individual upon whose head this was, had a very great talent at imitation. Finding this a prominent feature of the person's character, he bore the hint in mind while he proceeded to farther observations. His first essay was at the Deaf and Dumb Asylum, where there was a boy who possessed the same talent, in a surprising degree, notwithstanding the disadvantages under which he laboured, through his natural defects. On this head was the same prominent rising. A man in publick life, a secretary to the war minister, furnished the next example. His head and character both fully confirmed the previous eases; and from this Dr. Gall proceeded, as was his frequent custom, to schools, families, and publick hospitals, when confirmation

everywhere rewarded his efforts. Having proceeded thus far, it occurred to him that as this was a talent indispensable to good actors, he might derive still farther proof from their heads, either of the truth or errour of his suspicions. He therefore sought out and examined the heads of the great actors of that day, as Muler, Lange, Brockman, Koeh, and his daughter, Madame Brede, Monteufel, Talma, &c. Also in the portraits and busts of the earlier great comedians, &c., he found it large, as in Shakspeare, Garrick, Clairon, Boran, Molière, Corneille, Siddons, and many others. In this way Dr. Gall multiplied facts, by observations, until doubt no longer remained.

26th. Sentiment of religion — Reverence. Dr. Gall's brothers and sisters, although all received the same education, were possessed of very different dispositions and powers of mind. One of the brothers had an unusually strong tendency to devotion. His toys were church ornaments, constructed by himself. His father designed him to pursue a commercial calling; but with this the lad was soon displeased, and he ran away, and became a hermit. At the instance of Dr. Gall, that brother was permitted, by the father, to turn his attention to devotional study; and he spent his whole life in the exercises of devotion and penance. Dr. Gall remarked, among his acquaintances, that some, like this brother, had a natural liking for the priesthood,

and for devotional exercises; while others, educated in the same way, and under the same circumstances, were either indifferent to all this, or had a marked dislike for it. These several observations convinced Dr. Gall that this tendency was innate; and scarcely had he begun to look for external signs which might indicate the talents and dispositions of individuals, when these facts arose fresh in his recollection. proceeded to examine the heads of his friends; and subsequently those of religious professors, of whatever sect; and he particularly observed those who were most fervent. Monasteries, also, became objects of his visits and attention; and whenever he could learn the characters of the inmates, he applied his investigations to the developments of their heads: and he did the same with celebrated preachers. Finding many of those most devout to be bald upon the upper part of the head, he was attracted, by this circumstance, to that region, and the conformation there eventually disclosed the seat of the organ in question.

27th. Firmness, constancy, perseverance — Firmness. Dr. Gall was led to suspect that there might be an organ for this quality of the mind, from the fact that he found it bearing no proportion to the intellect, and no way in unison with the circumstances in which the individual had been educated. He found this quality remarkable in the painter Unterberger, who

was immoveable in whatever he undertook, although he did not always hit upon that which was most to benefit himself or his family. He also found a remarkable rising, in the region where this organ is situated, upon the seull of a robber who was long confined in prison, to induce him to inform against his associates in crime. This proving ineffectual, seourging was resorted to, and after suffering much, in this way, he ended the matter by strangling himself, but without making any disclosure. Drs. Gall and Spurzheim, for they were then together, found this organ very largely developed in a criminal who feigned to be deaf and dumb for a whole year; and by following out the investigations thus begun, the organ was at length fully established.

In the phrenological busts of the present day, all the discoveries since Gall appear; and consequently several organs are there which were unknown to him. Some of these have been found within the spaces he had allotted to other organs, and others upon surface whose uses he had not ascertained. As the organs established by Dr. Gall did not occupy all the surface of the head, he was wont, in the busts and drawings that he published, at different periods, to lay down only such organs as he had discovered, with the surface he supposed them to occupy, leaving the rest of the head an unsurveyed blank — a kind of Oregon territory, not

sub-divided, in the maps—; and portions of this waste region he subsequently appropriated, from time to time, as he successively discovered the purposes for which nature had designed them.

Thus far, then, was phrenology brought down by its legitimate discoverer; and here he may be said to have left it. He certainly did so, as respects individual organs, and to all else pertaining to the seience he paid little attention, save his conjoint labours with Dr. Spurzheim, mentioned hereafter. Let it not be supposed, however, that this remark can, in justice, be construed in any degree unfavourably to Dr. Gall's memory: far from it. It has been shown that he discovered twenty-six of the organs, (they number twentyseven, but it will be seen, by referring back, that two of his are now included in one); and nothing having been done previously, in this way, it is not to be supposed that he had either time or the necessary data for carrying out the philosophy of the seience; which, in truth, time has not yet enabled his suecessors to do, except very partially, and in some particulars. did not, himself, suppose he had completed, alone, and single-handed, what in two thousand years the combined mental effort of intellectual man had been unable even to commence, namely, a system of mental philosophy founded in nature and truth; but on the contrary, after having contributed all in his power to its

development, he left his valuable boon, confessedly imperfect, to be improved and extended by others. It has not been the lot of any man to discover the elcments of a science, and yet himself perfect all its de-The discoveries of Newton, although of high tails. importance to mankind, are now comparatively valueless, if not combined, in their application, with those of Lagrange, Laplace, and other master spirits who came after him; and even these have already been succeeded, by one, at least, who, without diminishing the importance of the eternal truths they discovered, has already pushed the detail of refined analysis much beyond the terminal point of the labours of those great men. Attention is here called to these facts, for the benefit of those minute criticks who have so often disproved the great truths which Gall disclosed, by showing he did not, in every case, strictly and perfectly describe and define each propensity or power whose seat he discovered in the brain; and that he still farther offended by selecting names so inappropriate as to cause the substitution of others, more befitting, by subsequent phrenologists. And yet, from the very nature of the investigations in question, what else was to be expected? The organs of the brain, as developed upon the exteriour of the head, could only, in the first instance, be detected and fixed in extreme cases, or in cases of extraordinary size of the organs.

In this way they actually were discovered; and of course, in the possessors of them, these organs were manifested in action, by that excess which constitutes their abuse. It was the actions, then, arising from the abuse of the organs which furnished Dr. Gall with his names. Hence the organ of destructiveness he named that of murder. Now, a great excess of power, in this organ, often produces murder; and yet its influence, in due and just proportion with the rest of the head, is of the highest importance, and therefore greatly to be desired. But we must not forget that in this proportion it was not discovered, and consequently it was named before its true character was understood. same is true of the greater part of the organs discovered by Dr. Gall: nearly all the names he bestowed have been changed, and several of them more than once; while some, at least, cannot even now, with any certainty, be considered fixed. Yet the organs remain unchanged: it is only their names that fluctuate, as the nature and offices of the organs themselves become better understood. This is true of other sciences; instance chymistry, geology, &c.; and the propriety of these changes has been too apparent to admit of any hesitancy on the one hand, or of complaint upon the other.

Having recounted the discoveries of Gall, we proceed to the second illustrious name in phrenology,

namely, John Gaspar Spurzheim. Dr. Spurzheim, who has written much upon phrenology, was long an associate with Dr. Gall; and, when the latter ceased his labours, the former toiled on, amid scoffing, and every discouragement, until the day of his death.

Broussais, in his "Leçons sur la Phrénologie faites à la faculté de Médecine de Paris," thus points us to the valuable labours of this philosopher: "Spurzheim has made most interesting observations; and notwithstanding some have accused the phrenologists of an undue confidence, and a sort of superstitious credulity in this one of their number, yet I do not hesitate to say that, in my eyes, he was a great man. After Gall it is he who has accomplished most for phrenology." And again, in the same work, he says: "Spurzheim was, like Gall, a man of genius, who had not, indeed, the merit of discovering the science of phrenology, yet he had that of having made remarkable progress therein. and of rendering it acceptable and interesting to those who had, until then, looked upon it only with repugnance." Such was the testimony, so late as 1836, of one of the first medical men of France, upon the character and labours of this lamented philosopher.

Dr. Spurzheim was born in 1776, at Longuiel, a village near Treves, on the Moselle, in Germany. He was originally destined, by his parents, for the church; but having passed through his collegiate

course, he went to Vienna, in 1799, to study medicine, instead of theology, and there became acquainted with Dr. Gall. The first written notice of Dr. Gall's inquiries concering the head, appeared in a familiar letter to Baron Retzer, which was inserted in a German periodical, in December, 1798. Two years previous to this he had given private lectures, upon the subject, at Vienna. Some of his hearers afterwards made publick notices of his doctrines, which ultimately drew from the Austrian government an edict that such lectures must cease, his doctrines being considered dangerous to religion!*

^{*} The persecutions of Galileo, for teaching the "irreligious" doctrine that the carth moved, are familiar to all; but it may not be as generally known, that so late as 1820, this same spirit showed itself at Rome; but only, in this instance, to meet merited rebuke at the hand of its intended victim. In that year the professor of astronomy at the academy della sapienza, at Rome, seignior Settele, submitted the manuscript of his astronomical lectures to the appointed authorities, soliciting permission to print them. This was refused, "because he defended the motion of the earth round the sun"-a doctrine that, in the case of Galileo, had been settled as contrary to the bible. The ingenuity of the professor, however, promptly relieved both himself and the authorities from all embarrassment. He applied to the Inquisition, with the request that it would substitute its own explanation for that part of his work which had been condemned; to the end that he might publish this with the unobjectionable portion of his labours! Caught in their own toils, the Inquisitors transmitted, in reply to this request. permission to publish the original work, without alteration!

Dr. Spurzheim's efforts have been somewhat differently directed from those of Gall, and therefore do not admit of being treated in the same manner. As already stated, his early labours were performed in conjunction with Dr. Gall; and much was accomplished for phrenology, upon the continent of Europe, by their united efforts. In 1800, Dr. Spurzheim became the pupil of Gall: he entered with zeal, into the new doctrine which Gal! was just then opening to the world; and for four years this relation continued. In 1804, having completed his medical studies, he became associated with Dr. Gall, in his labours; and from that period his character of pupil ceased. After this association was adjusted, being, as has been seen, prohibited from inculcating phrenology at Vienna, by an edict of the government, they left that city together, in 1805, for the purpose of pursuing, jointly, and in common, their researches into the anatomy and physiognomy of the nervous system. During the ensuing two years they visited many of the principal towns on the continent, lecturing upon this "new doctrine," and dissecting the brain, to illustrate its truth. In this peried they thus visited Berlin, Potsdam, Leipzig. Dresden, Hallé, Weimar, Jena, Göttingen, Brownschweig, Hamburg, Kiel, Copenhagen, Bremen, Münster in Westphalia, Amsterdam, Levden, Frankfort

on the Main, Heidelberg, Manheim, Stuttgard, Fribourg in Brisgaw, Marburgh, Wurtzburg, Munich, Augsburg, Ulm, Zurich, Berne, Bâle and Paris. Such was the amazing industry with which these men toiled for the benefit of after ages. At Paris Dr. Gall now settled, and he there gave his first publick course of lectures - being still associated with, and assisted by, Dr. Spurzheim. Here, too, they dissected the brain, first in the presence of Cuvier, Fourcroy, Geoffroy de St. Hilaire, Duméril, Dr. Demangeon, &c., and ultimately before many learned societies. Some of these gentlemen thought much of Dr. Gall's illustrations; and Cuvier, in particular, was heard to assert, in a circle not strictly private, his approbation of its general features. But higher authorities did not encourage these researches. Broussais, in his phrenological work, in French, already quoted, has this remark upon the subject: "Napoleon protected all the arts; all the works of the imagination; all the sciences which, oecupied with material facts, tended to advance the social organization, to multiply the means of existence, and to augment the resources of the country; but he disliked profound discussions upon the nature and origin of the faculties, and in consequence of this he pronounced the proscription of the system of Gall. Senators, generals, counsellors of state, and learned men

who had been admitted to the course, followed assiduously the demonstrations of Gall, at this memorable epoch; but the day after that on which the Emperour, at his soirée, and in full saloon, "indulged in certain pleasantries at the expense of the craniologist, the lectures of the professor ceased to be honoured with the presence of these distinguished personages." In 1808, Gall and Spurzheim presented their memoir upon the anatomy of the brain, to the Institute, at Paris. A commission was named, by the Institute, to report thereon. This report was prepared by Mons. Cuvier; and that distinguished naturalist exercised his skill to diminish the merits of these phrenologists. He artfully evaded their real discoveries, however important, as set forth in their memoir, and dwelt, with patient complacency, upon whatever circumstance or fact could be found that was susceptible of being construed to their disadvantage.* To this report Gall and

^{*} Mons. Bouillaud, in his recent work upon medical philosophy, alludes to the incredulity of Mons. Magendie, who ranks phrenology with necromancy, alchymy, and astrology; and sums up his opinion in these words: "the efforts of this pseudo-science are reduced to assertions which cannot sustain examination for an instant." To this, Mons. Bouillaud, in his work above-mentioned, replies: "In vain Cuvier and even Napoleon opposed themselves to the doctrine of Gall: that doctrine triumphed over their resistance; and, by a retaliation

Spurzheim prepared and published a detailed reply, giving each scetion of the report separately, and following it with strictures and expositions, such as they deemed the nature of the case to admit and demand. In 1810 was commenced the publication of "Anatomie et Physiologie du Systéme Nerveux en général, et du Cerveau en particulier," by Gall and Spurzheim, conjointly. This work was not completed until 1819; and as, in the mean time, (1813,) a separation of the labours of Gall and Spurzheim took place, the third and fourth volumes of this great work appeared in the name of Gall, alone. The whole work is illustrated by a rich folio atlas, containing one hundred plates.

From the period of this separation Spurzheim began to give new and important features to phrenology. Dr. Gall had already accomplished so much, in the discovery and establishment of individual organs, that there was both leisure and necessity for Dr. Spurzheim to apply some portion of his powers to the bringing forward and illustrating other features of the science. At this time phrenology had much to contend against. Most of the names bestowed upon the organs, by Gall,

worthy of itself, it now employs the heads of these two great men to illustrate and support its principles! After such a victory, and now still better understood, what enemy has phrenology hereafter to dread?"

as the reader has seen, being derived from excessive manifestations of those organs, were such as gave rise to a combined feeling of horrour and repugnance, whenever they were mentioned; and this unfavourable aspect was increased by the incipient stage in which the whole matter then was-being little else than a mere catalogue of organs; or, as it was generally called, "Gall's doctrine of brain and scull." The nervous system, the medium of sensation and of motion, required more extended and sane investigations. Much had been well begun, in the great work we have mentioned; but not completed. "Since our conjoined publication," says Dr. Spurzheim, "I have extended our notions of the communication of the nerves and cerebral parts with each other, and collected them in a separate section, in my English work on the anatomy of the brain. During the last three years I have been occupied in showing the regularity of the cerebral portions, and with specifying the individual organs and their boundaries. This additional discovery was desirable for phrenology. It is also a means to prove that individual parts are wanting in various idiots, and in the brain of the orang-outang, which, however, has the greatest analogy with the human brain.* 1 pre-

^{*} It is worthy of remark, that the old schools of mental philosophy offer no explanation, by their systems, of the well-

sented these ideas in a paper, accompanied with drawings, to the Royal Society of London. The council of this learned body permitted them to be read, but did not think the paper worthy of being published in their Transactions. My ideas, however, are new, nowhere demonstrated in books, and will be, I am sure, appreciated by phrenologists, as the completion of the phrenological anatomy of the brain." Dr. Gall died without knowing the regularity of the convolutions and boundaries of the cerebral organs.

"My special rectifications of phrenology, and new physiological discoveries, begin with our separation from each other, in 1813. They concern particularly, the discovery of new organs, and the analysis of the special powers of the mind, whilst Dr. Gall mostly confined himself to the comparison of talents, characters, and certain modes of acting, with individual cere-

known fact that some children are born idiots, while others are not; and it may well be deemed matter of surprise that this self-evident defect of those systems has not been made matter of more serious complaint against them. Should not a philosophy of mind show why some are born without the power of manifesting its possession? Phrenology does show that the brains of those born idiots, are absolutely wanting, in some parts, some convolutions, which, in the brains of sane and able-minded persons are always found; and also, that convolutions not wholly wanting are often partially so, in the brains of such unfortunates.

bral portions. He admitted, in every power of the mind, the same modes of action; for instance, perception, memory, judgement, and imagination; whilst I classify the mental powers into orders, genera and species, and examine the common and special modes of acting of the different faculties. Farther; Dr. Gall ascribed to the senses the notions which the mind acquires of existence, and of the physical qualities of the external objects, whilst I think those operations of the mind to be dependent on cerebral organs. I therefore speak of immediate and mediate functions of the external senses; in the former the mind takes cognizance by the assistance of the senses alone; in the latter it is assisted, besides the senses, by cerebral organs. In general, my philosophical views in phrenology differ widely from those of Dr. Gall. He never endeavoured to point out the standard of natural morality. In the natural language I discovered several principles in addition to that found by Dr. Gall: that the movements of the head, body, and extremities, are modified by the seat of the organs in action. Moreover, in the practical part of phrenology, and in examining the development of the special organs, I began to pay more attention to the breadth of the organs than Dr. Gall was accustomed to do, and directed phrenologists to attend to the individual regions of the head, in reference to the three lobes of the

brain, and to the three regions of the animal propensities, the human sentiments, and intellectual faculties, rather than to the protuberances and depressions to which Dr. Gall attached himself almost exclusively. In short, the comparison of Dr. Gall's works with my publications on phrenology, on its philosophical principles, on education, insanity, and other matters, will best show how much I have contributed to extend and improve phrenology, and to forward its study."

In 1813 Dr. Spurzheim visited Vienna, when he took his degree of doctor of medicine; and in the following year he quitted the continent for England, with the intention of introducing phrenology there. To effect this, difficulties of no ordinary magnitude, and of a peculiar kind, were to be overcome. From some cause, the English had then become - as, indeed, in a good degree they still continue - strongly averse to receiving any instruction from the continent; and this indiscretion involved, of course, the implied assumption that the philosophers of the continent neither were, nor could be, in possession of any knowledge of which they, in England, were not equally masters. Nor was this unprofitable feeling then of recent origin. had long before been producing its bitter fruits, and casting its blighting shade over the progress of science, in England; the consequences of which were both seen and deplored by some who had the fortune

to discern and the frankness to point them out for correction. Of these, Playfair - whose name is immortal - was one. In 1808 this philosopher stated that, in the list of mathematicians and philosophers to whom the science of physical astronomy, for the previous sixty or seventy years, had been indebted for its improvements, hardly a name from Great Britain was to be found; and that his countrymen had not grappled with the gigantick problems, in this science, which had engaged the scholars of the adjacent coast, from a "consciousness that, in the knowledge of the higher geometry, they were not on a footing with their brethren of the continent." Of the celebrated Mécanique Céleste, the same writer, on that occasion continues, that there were not twelve persons in Great Britain that could read the book, with any tolerable facility; and this "from want of knowing the principles and the methods which are taken for granted [by continental writers, as known to every mathematical reader." So much for the book itself: of its author, Brewster, of Edinburgh, - another well known name -says: "the contemporary of Lagrange, in this brilliant career of discovery, was the celebrated Laplace, a name which, in this country, we have been taught to calumniate, but which every friend of science will associate with her most noble efforts, when the days of prejudice and illiberal sentiment are past." These

examples of illustration, in a single science, had, unfortunately, but too many parallels in all the other branches of scientifick research; and it was against the combined agency of this blighting prejudice and conceited pride, that both phrenology and its abettors were doomed to contend, when Dr. Spurzheim carried the first knowledge of the science to England. "The manner in which it was then received," says an able pen, "was not such as to authorize a belief that it ever could be treated but with contempt." Ridicule, sophistry, and scandal were the three weapons first employed against Dr. Spurzheim, on his setting foot in England. His doctrines, his country, and his person were equally and simultaneously attacked: even the itinerant labours which he had performed upon the continent, conjointly with Dr. Gall, were converted into material for engendering foul reproach. Against all this Dr. Spurzheim battled, single-handed, as best he might. In a land of strangers, who spoke a language which he had but recently acquired, and of whose manners and habits he was greatly uninformed, he opposed to these mingled assaults only the truths he had come to defend, and that calmness which a consciousness of their immutable character had inspired. During this unpleasant contest, Dr. Spurzheim published, in English, "the Physiognomical System of Drs. Gall and Spurzheim," 8vo. London, 1815;-

"Outlines of the Physiognomical System," 12mo., London, 1815; and "Observations on the Deranged Manifestations of Mind, or Insanity," 8vo., London, 1817. The first of these works was assailed, in the Edinburgh Review, in a tone and with a violence to which that lofty Quarterly had not previously stooped. The author was Dr. John Gordon; and many of his periods were disfigured by the most able and practiced combinations of such epithets as elevated minds ever seek to avoid. Dr. Spurzheim read the review at London, and immediately resolved upon a visit to Edinburgh. He procured but a single letter of introduction, which was to Dr. Gordon, himself; and thus furnished he reached the Scotch capital. He called upon his assailant, and obtained permission to dissect a brain in his presence. Dr. Gordon was himself a lecturer on Anatomy, and the dissection took place in his lecture room. Some of those present were convinced, others were not, of the truth of Spurzheim's views; and a second day was named. On this occasion all were present that could be accommodated, intermediate seats being reserved, so that Dr. Spurzheim might pass to each individual, in succession, and exhibit to him his demonstrations. "There, with the Edinburgh Review in one hand, and a brain in the other, he opposed fact to assertion." Dr. Gordon still believed his own assertions, in the Review, but the eye-witnesses of what was exhibited, believed Dr. Spurzheim; "and that day won over near five hundred witnesses to the fibrous structure of the white substance of the brain," while the demonstrations then made detached from Dr. Gordon a large number of his former pupils.

Satisfied, thus far, with his success Dr. Spurzheim forthwith opened, at Edinburgh, a course of lectures on the anatomy and the functions of the brain, and its connexions with mind. He often remarked to the Scotch, "you are slow, but sure; I must remain some time with you, and then I shall leave the fruits of my labours to ripen in your hands."

The criticisms which were showered upon Dr. Spurzheim in the British Islands—for attacks upon both him and his doctrines were not wanting through all grades of the publick press—drew from him an "Examination of the Objections made in Britain against the Doctrines of Gall and Spurzheim." In this work, octavo, Edinburgh, 1817, a very full and somewhat severe, but still a perfectly dispassionate and courteous exposure is made of the ignorance and the arrogant presumption of those who had thus become assailants of phrenology.

During this visit to the English Islands, Dr. Spurzheim lectured in London, Bath, Bristol, Dublin, Cork, Liverpool, and Edinburgh. In 1817 he returned to London, from his visit to Edinburgh, &c., and deli-

vered there another course of lectures; and during this stay he became a licentiate of the Royal College of Physicians in that city.

Having now been absent from the continent near three years, Dr. Spurzheim, in July, 1817, returned to Paris. Here he remained until 1825 - eight years assiduously engaged in cultivating his new views, and contributing, as far as in his power, to the advancement of the science of human nature. At Paris he delivered, regularly, two courses of lectures, each year, on the Anatomy, Physiology and Pathology of the Brain, and the External Senses. It was during this period, also, that he published several of his valuable works, which were issued at Paris. In 1818 appeared his "Observations sur la Folie, ou sur les Dérangemens des Fonctions Morales et Intellectuelles de l'homme," with two plates; and "Observations sur la Phrénologie, ou la Connaissance de l'homme, Morale et Intellectuel, fondée sur les Fonctions du Système Nerveux," with seven plates. In 1820 he published his "Essai Philosophique sur la Nature, Morale et Intellectuelle, de l'homme." His work in English, namely, "View of the Elementary Principles of Edueation, founded on the study of the Nature of Man," appeared at Edinburgh, in 1821. Of this a French edition was issued at Paris, in the following year; and in 1828 another edition, in English, much enlarged,

was published at London. In 1824 the French government, adopting the wisdom of the Austrian, prohibited the delivery of all lectures, without its especial permission; and Dr. Spurzheim was therefore obliged to desist from all oral teaching, save what he communicated in conversation at his own house.

In 1825 he again visited London; and in March and April of that year delivered two courses of lectures there, each eighteen in number; besides several courses of dissections of the brain, at St. Thomas' and St. Bartholomew's Hospitals, and in some of the medical schools. On this occasion the manner in which he was noticed by the periodicals, particularly the Medico-Chirurgical Review, and the Lancet, and also by some of the leading newspapers, was in the highest degree consoling to one who could not but recollect the former ill treatment which he had received at the same hands; and the change in the publick mind, thus manifested, was no less gratifying to the friends of philosophy, generally, than to him who was its more immediate object. During this visit to London, Dr. Spurzheim published two important works, namely, "Phrenology, or the Doctrine of the Mind, and of the relations between its Manifestations and the Body," with fifteen engravings; and "A View of the Philosophical Principles of Phrenology"; both in octavo. "In these works, which, like the 'View of the Elementary Principles of Education,' are extended editions of some of the principal chapters of the 'Physiognomical System,' the comprehensiveness and profundity of intellect, the accuracy and assiduity of observation, and the purity of moral feeling, which distinguish all Dr. Spurzheim's writings, are conspicuous; and they will be a monument by which posterity will judge correctly of the admirable character and talents of this great phrenologist."

Dr. Spurzheim now returned once more to Paris; but his stay was of short duration, for in the early part of 1826 he again revisited London, where he lectured to large and intelligent audiences, and was generally received with kindness and respect. It was during the course of this year that he published the two following works: "Phrenology in connexion with the study of Physiognomy, part one, Characters; with thirty-four plates;" and "the Anatomy of the Brain, with a general view of the Nervous System; with eleven plates." After the publication of these works he returned again to Paris; but soon after forming the resolution to remove permanently to England, he executed his plan, within the same year; and near its close he visited Cambridge. On this oceasion he had no cause of complaint: at the University he was received with distinguished respect. The use of the publick lecture room was granted him,

for his lectures, and his audience, embracing men of the first standing and influence in the University, exceeded one hundred in number. He also lectured upon the dissection of the brain, several times, in the lecture room of the anatomical professor; and he was feasted in the College Halls, daily, while he remained. The impression which he produced, particularly upon the anatomical and medical professors, was in the highest degree satisfactory. He subsequently lectured at Bath and Bristol, with success; the interest increasing with each lecture, to the last. In April, 1827, he again lectured in London; and in the same year he published his "Outlines of Phrenology; being also a Manual of reference for the marked Busts." From London he went to Hull, where he lectured; and visited the work-house, insane hospital, grammar school, and town jail; and in January, 1828, he again reached Edinburgh. Here he delivered several courses of popular lectures, and also courses upon dissections of the brain; and both his reception, and the attention paid to his illustrations, contrasted proudly, for him and for science, with what it had been his fortune to encounter, upon a previous occasion, in the same city. On the 25th of January, 1828, the Phrenological Society of Edinburgh, gave a dinner to Dr. Spurzheim; and upon that occasion he thus expressed himself: "Dr. Gall and myself often conversed together about the future admission of our

doctrines: though we relied with confidence on the invariable laws of the Creator, we, however, never expected to see them, in our life-time, admitted to such a degree as they really are." During the same year he visited Glasgow, where he delivered one popular and one professional course of lectures. It was while at Edinburgh and Glasgow, at this time, that a protracted correspondence took place between Dr. Spurzheim and Sir William Hamilton. The latter gentleman took an active part against phrenology; but yet he preferred a war of words, only, rather than examination of tangible realities. To this latter alternative Dr. Spurzheim endeavoured to bring his adversary; and no less than five times did he challenge him thereto; but the wary baronet declined it as undignified! It was also during this year that Dr. Spurzheim published his "Sketch of the Natural Laws of Man."

He now returned once more to London, where he applied himself, with patient assiduity, to the inculcation and diffusion of phrenology. On the 14th of May, 1829, a paper of his, upon the brain, was read before the Royal Society. The history of this paper Dr. Spurzheim has given in the preface which he published with the paper itself, soon after.* He states

^{*} This paper is mentioned at p. 68; but the history of its production is not there related; nor is the *real cause* of its rejection from the printed Transactions.

that he had been requested, by his friend Chenevix, to furnish a paper on some point of phrenology, proper to be presented to the Royal Society of London; and he then continues: "I complied with his wish, in order to try the wisdom of that learned body, and my lamented friend delivered the following paper to one of the secretaries, who read it to the Society, but declared that it could not be printed in the Transactions of the Society, because it did not contain any new matter." Dr. Spurzheim, after showing, in detail, that this assumption is erroneous, thus proceeds: "It is, however, conceivable that the Secretary, who never ceased to be hostile to phrenology, found, as he said, that my ideas require a great imagination to be admitted, and objected to their being printed in the Philosophical Transactions. My friend Chenevix, in order not to have a formal refusal, withdrew the paper. The adversaries of phrenology may not appreciate, perhaps not even understand, the principles and ideas of my paper; but those who take interest in the most important part of Anthropology will appreciate them, as the completion of the Phrenological Anatomy of the Brain."

After lecturing in some dozen different towns and cities of England; delivering two courses in Dublin, and being elected an honorary member of the Royal Irish Academy, Dr. Spurzheim, in 1831, once more

returned to Paris. During the winter of 1831-2, he lectured in that city; and in the spring of the latter year he published, in a small volume, his "Manuelle de Phrénologie," which is the last of his works.

Dr. Spurzheim had now conceived the idea of visiting the United States; and on the 20th of June, 1832, he sailed from Havre, for New-York, where he arrived on the 4th of the ensuing August. At that period, as we shall learn from subsequent pages, phrenology had made but inconsiderable progress, in the northern and eastern portions of the United States, although it had a few very able and intelligent defenders there. Without attempting publick phrenological teaching, in the form of lectures, he proceeded to Boston; visiting, on his way, the state's prison, at Weathersfield, Conn., where he freely gave his opinions upon the phrenological development of many convicts confined there. At Boston he gave his first lecture upon the subject of education; and in September he commeneed a course of eighteen lectures upon phrenology. This course was at Boston; but he gave, also, one at Cambridge University. Both these were popular; while before the Medical Faculty he gave still another, upon dissections of the brain, &c. He was warmly received, in the first circles of science and literature, and was every where welcomed as a philosopher whose knowledge of mental phenomena was valuable above

anything that could be acquired from the older schools of that science. He visited, extensively, the various schools, within his reach; and often astonished the teachers by displaying a more intimate acquaintance with the mental peculiarities of the pupils, by merely observing their heads, than their preceptors had been able to acquire from months of daily intercourse. This was peculiarly the case with all such as had a large development of the organ of scretiveness. state's prison, too, his observations were equally demonstrative of the truths of phrenology; while in private circles his constant application of the principles of the seience daily won over to it those with whom it was his fortune to be associated. Great interest in phrenology was thus excited in Boston, where the foundations of protracted future investigations, on this subject, may thus be supposed to have been laid: and probably the same would have been done by Dr. Spurzheim, at various other points of our country, had not death prevented. Before, however, he was prepared to leave Boston, on his tour through the United States, he fell sick; and on the 10th of November, scarcely more than three months after first setting foot in the country, he expired. The funeral honours paid to his memory fully attested the deep hold his teachings had taken upon the minds of those to whom he was so recently an entire stranger.

Should some portion of the previous pages be thought rather to partake of a biographical than historical character, it must not be forgotten that such semblance was unavoidable, from the fact that, for a long period, phrenology had but a single able devotee who stood boldly forth, professionally, either to inculcate its principles or to defend it from assault; and that the progress which the science, during this time, was making, could only be shown by noting the daily walk and reception of him who thus toiled, single-handed, for its promulgation.

The labours of Dr. Spurzheim, whose philosophick course we have rapidly traced, were in the highest degree important to the development and practical application of phrenology. His reformation of the nomenclature of Gall has been noticed and shown: his anatomical researches, also, have been alluded to; but to estimate these justly, a careful study of his works upon "the Anatomy of the Brain"; "Observations on Insanity," &c. &c., and a comparison of them with all that was previously known upon the points on which he treats, is indispensable. When this has been done, the importance of this part of Dr. Spurzheim's labours proves to be great indeed - even far beyond what simple estimate would concede. To the number of the organs, too, Dr. Spurzheim has liberally contributed. We have seen that Dr. Gall well settled twentysix organs of the brain: to these Dr. Spurzheim has added nine others, of his own discovery.* They are the following: "Inhabitiveness, Conscientiousness, Hope, Marvellousness, Individuality, Size, Weight and Resistance, Order, and Time.

He was also the first to attempt any classification of

^{*} We are aware that this statement, if unexplained, may be deemed an errour, as Dr. Spurzheim, in one of his works, claims the discovery of only eight organs. He, however, numbers thirty-five upon his bust, and in his phrenology, while he includes in these only twenty-six that are found in Dr. Gall's works, and claimed by him. Mr. Combe, too, awards to Dr. Gall the same twenty-six; and yet, like Spurzheim, enumerates and describes thirty-five, in all. Two causes may have contributed to this apparent anomaly, namely: 1st, Dr. Gall's liaving made two of the organ of language, and in this way making his whole number twenty-seven, although all subsequent phrenologists treat these two organs of Gall's as but one; and 2d, Dr. Spurzheim's having claimed only eight as of his own discovery. Mons. Broussais, in his "Cours de Phrénologie," says: "Gall did not distinguish Marvellousness from Ideality, but confounded this faculty with that which he designates the poetick talent: Spurzheim separated them." It may, then, very well be that, under these circumstances, Dr. Spurzheim did not see fit formally to claim the discovery of this organ; and subsequent writers, seeing that he fixed the number of his claim at eight, and that by Dr. Gall's method of division he numbered twenty-seven in his discovery, they have thus arrived at the correct total number of organs, by recording only eight as discovered by Spurzheim. Still, as he was the first to describe and number this organ, we see not to whom else its discovery can be awarded.

the organs; and although what he accomplished, in this, is manifestly far from perfect, still, as a first attempt, it was creditable to its author, and in some degree useful to the science. Dr. Gall was not so far successful, in any effort of this kind, as to have induced him to allow his labours to see the light; nor is it probable, in the state in which he left the science, that anything valuable could have been accomplished by him or others.

The powers and organs of the mind, Dr. Spurzheim, according to his last modifications, divided into Affective and Intellectual faculties; and these are again sub-divided, the former into Propensities and Sentiments; and the latter into Perceptive and Reflective powers. The whole, by this arrangement, will stand thus:

AFFECTIVE.

1st. PROPENSITIES.

Desire to Live ;*

Alimentiveness; *

- 1, Destructiveness; 2, Amativeness;
- 3, Philoprogenitiveness; 4, Adhesivenesss;

^{*} These two organs are stated, by Dr. Spurzheim, as probable, only, but not established. He does not claim the suggestion of them; nor are they numbered by him.

- 5, Inhabitiveness; 8, Acquisitiveness;
- 6, Combativeness; 9, Constructiveness.
- 7, Secretiveness;

2d. SENTIMENTS.

- 10, Cautiousness; 16, Conscientiousness;
- 11, Approbativeness; 17, Hope;
- 12, Self-Esteem; 18, Marvellousness;
- 13, Benevolence; 19, Ideality;
- 14, Reverence; 20, Mirthfulness;
- 15. Firmness; 21, Imitation.

INTELLECTUAL.

1st. PERCEPTIVE.

- 22, Individuality; 28, Order;
- 23, Configuration; 29, Calculation;
- 24, Size; 30, Eventuality;
- 25, Weight and Resistance; 31, Time;
- 26, Colouring; 32, Tune;
- 27, Locality; 33, Language.

2d. REFLECTIVE.

34, Comparison; 35, Causality.

Without dwelling longer upon the labours of one whose range of effort was so widely extended as to preclude all attempt at more than a condensed view of it here; and who, to be appreciated, must be studied, through his numerous and valuable works, we pass to the name and phrenological services of

Mr. George Combe. We cannot better introduce a notice of this accomplished scholar and able philosopher, than by adopting the language of the Edinburgh Phrenological Journal, respecting him. "Mr. Combe's great merit, as a phrenologist, unquestionably consists in his judicious, zealous, and persevering endeavours to disseminate the knowledge of the doctrines of Drs. Gall and Spurzheim. In neglect, amidst ridicule, and under the most violent personal aggression, he has always exhibited the same composed reliance in the goodness of his cause, and to it, alone, trusted its final success, and the consequent removal of the aspersions upon his own prudence and integrity. How much this truly philosophical proceeding has contributed to the diffusion of the science, in Scotland, at least, our readers do not need to be informed. There can be little doubt, indeed, that the truth of phrenology and the importance of its practical applications would have ensured its ultimate reception in this country; but had it not been for the unostentatious, but well-directed and indefatigable exertions of Mr. Combe, it is difficult to say how long it might have been confined to a few isolated individuals, without taking any hold of the publick mind. By continually bringing the subject under general

notice; by repelling the objections that, from time to time, were brought forward; by exhibiting a faithful view of the principles that Drs. Gall and Spurzheim maintained, and by adapting the application of them to the habits and tastes of those whom he addressed, Mr. Combe has succeeded beyond what the warmest friends of phrenology could have anticipated. The speedy prevalence of the science is now no longer a matter of doubt, the load of ridicule and abuse that was once heaped upon it is removed; and we have the satisfaction of hearing even our enemies allow that the subject is one which deserves attention."

Such were the remarks with which a dignified and able periodical, in the city of Mr. Combe's residence, opened a review of the second edition of his "System of Phrenology," in 1826. Mr. Combe is now, (March, 1839,) in the United States; and if all this were true of him, in Scotland, at that early period, it is doubly so, at the present day, here. His "System of Phrenology" has been studied, or at least read, by almost every one in America who has looked upon phrenology, or given any attention to the defects of the older systems of philosophy; and since his arrival in our country, he has been assiduously engaged in disseminating the science of mind, by publick lectures, as well as by conversations, and his pen. In 1833, he prepared, "by request," a corrected edition of his

work, for the American press; and in a note which he has prefixed thereto, after a touching and creditable advertence to the memory of Gall and Spurzheim, with a modesty which everywhere characterizes his writings, he adds: "We who remain profess to be only humble disciples, made wise by the wisdom of our masters, and shining with a light reflected from their brightness. In proclaiming the value and importance of their doctrines, therefore, we assume no merit to ourselves; we simply invite others to partake of a moral and intellectual banquet which we have enjoyed with the highest relish, and found to conduce to our happiness and improvement."

This will prepare, then, all those who are not familiar with Mr. Combe's work, not to expect in it wide deviations from Drs. Gall and Spurzheim; nor any considerable improvements in the science itself, beyond the point at which it was left by the latter. He has, however, made some changes, in a few particulars, that require to be noticed. The nomenclature of Dr. Spurzheim Mr. Combe has varied in a few instances, as will be seen by comparison of the two, as exhibited in their respective classifications.

Upon the subject of Classification, Mr. Combe observes: "It appears impossible to arrive at a correct classification until all the organs, and also the primitive faculty or ultimate function of each, shall be defi-

nitely ascertained, which is not, at present, the case. Till this end shall be accomplished, every interim arrangement will be in danger of being ovterturned, by subsequent discoveries." The following is the classification adopted by Mr. Combe:

ORDER I. - FEELINGS.

GENUS I. - PROPENSITIES.

- 1, Amativeness; Alimentiveness*;
- 2, Philoprogenitiveness; Love of Life*;
- 3, Concentrativeness; 7, Secretiveness;
- 4, Adhesiveness; 8, Acquisitiveness;
- 5, Combativeness; 9, Constructiveness.
- 6, Destructiveness;
- GENUS 11. SENTIMENTS COMMON TO
 MAN WITH THE LOWER ANIMALS.
 - 10, Self-esteem; 12, Cautiousness.
 - 11, Love of Approbation;

^{*} These two organs are treated as probable, by Mr. Combe; and, like Spurzheim, he has left them without numbers, in his "System of Phrenology." In his late Lectures in New-York, however, as reported and published by Mr. Andrew Boardman, Mr. Combe states that he now considers the organ of Alimentiveness as established. Of the Love of Life he speaks in the same work, but without giving a definite decision upon its claims.

GENUS III. - SUPERIOUR SENTIMENTS.

13, Benevolence; 18, Wonder; 14, Veneration; 19, Ideality;

20, Wit or Mirthfulness; 15, Firmness;

16, Conscientiousness; 21, Imitation.

17, Hope;

ORDER II. - INTELLECTUAL FACULTIES.

GENUS I. - EXTERNAL SENSES.

Feeling or Touch; Smell;

Hearing and Sight. Taste:

GENUS II. - INTELLECTUAL FACULTIES WHICH PERCEIVE EXISTENCE AND PHYSI-CAL QUALITIES.

22, Individuality; 25, Weight;

23, Form;

26, Colouring.

24, Size;

GENUS III. -- INTELLECTUAL FACULTIES WHICH PERCEIVE RELATIONS OF EX-TERNAL OBJECTS.

> 27, Locality; 31, Time; 32, Tune; 28, Number;

33, Language. 29, Order;

30, Eventuality;

GENUS IV. - REFLECTING FACULTIES.

34, Comparison;

35, Causality.

As already stated, the general features of Mr. Combe's phrenology coincide with those of his predecessors in the science. In relation to one organ, however, there is a material difference between the views of Mr. Combe and those of Dr. Spurzheim. This difference is not in regard to location, for in this they fully coincide, but in the nature of the offices of the organ itself. It is the organ designated Inhabitiveness, by Spurzheim, and which Mr. Combe calls Concentrativeness. The different duties assigned to this organ, by the two phrenologists, involved the change of name to which Mr. Combe has subjected it. This difference of opinion existed during the life-time of Spurzheim, and of his intimacy with Mr. Combe; and each writer, in his works, has given his own peculiar views in detail.* As the elements of phrenology must be studied

^{*} Mons. Vimont, as quoted by Mons. Broussais, from familiarity with this diversity of opinion, upon the organ in question, applied himself carefully to its investigation, in animals lower than man. Of course he found great attachment to place, in many of these; and in numbers he also found manifestations of the power of concentrating attention upon a particular subject. From the external developments upon these

before these can be appreciated, they would, on that account alone, if for no other reason, be manifestly out of place here. In his prefaratory note to the American edition of Mr. Combe's phrenology, already once quoted, the author, upon this point, observes: "To the best of my knowledge, there is no material point of doctrine on which he, [Spurzheim,] and I differed, except concerning the functions of the organ of Inhabitiveness. I continue to entertain the views expressed in my works, in regard to it. I may now add, without delicacy, that it was, perhaps, the only cerebral organ in which the superiority of development lay on my side, and that every one understands best the functions of those organs which are largest in his own brain. It was remarkably small in Dr. Spurzheim, and it appeared to me that he never comprehended the effect produced by it when large. The point, however, is left open for the judgement of all inquirers."

In addition to his phrenology, proper, Mr. Combe has written ably and extensively, in defence and demonstration of phrenological truth, upon various occa-

classes of heads, respectively, Mons. Vimont was led to the conclusion that there are tico organs; and that, in man, the organ of Concentrativeness occupies the superiour part of the region assigned to the organ of the love of place—thus dividing into two what other phrenologists had made but one,

sions; and also in application of its principles to the purposes of life in general. His work, namely, "the Constitution of Man," is both widely known, and highly appreciated; and although it is not, technically, a phrenological work, yet it is so, virtually, and has already done much for the science. Among his detached papers, none, perhaps, is more able, or more worthy the cause and its author, than his masterly "Letter," of eighty-two octavo pages, to Francis Jeffery, Esq., which appeared in the Edinburgh Phrenological Journal, in 1826, and was also extensively sold, in pamphlet form. Mr. Jeffery, as is well known, was editor of the Edinburgh Review; and the production of Mr. Combe here in question, was penned in reply to a review which Mr. Jeffery had then just given, of Mr. Combe's Phrenology; and in which he had patiently exhausted both his wit and his exalted powers of argument. The ancient hostility of the Edinburgh Review to phrenology, is proverbial: we have had occasion to advert to it before, in regard to Dr. Spurzheim. Mr. Combe informs us, elsewhere, that his "first information concerning the system of Drs. Gall and Spurzheim was derived from No. 49 of the Edinburgh Review. "Led away by the boldness of that piece of criticism," continues he, "I regarded their doctrines as contemptibly absurd, and their authors as the most disingenuous of men." These opinions were eradicated, in due time, by an acquaintance with phrenology itself; and neither slight or momentary was the indignation, we may suppose, which Mr. Combe felt, in common with others, at the uncandid but bold and ingenious deceptions with which the reviewer had adorned the caricature he had drawn. But reckoning day finally came; and it may well be said that Mr. Combe's "Letter" wrought out for the doings of the Reviewer much the same fate which Mazeppa, in a case no way parallel, avers to have provided for the castle of one to whom he owed payment for severity; and who

"Paid it well in after days:
There is not of that castle gate,
Its drawbridge and portcullis' weight,
Stone, bar, moat, bridge, or barrier left;
Nor of its fields a blade of grass,
Save what grows on a ridge of wall,
Where stood the hearth-stone of the hall;
And many a time you there might pass,
Nor dream that e'er that fortress was."

The early labours of Gall and Spurzheim, in France, have been already mentioned. The fruits of these are now being gathered, in a rich phrenological harvest, at Paris. Many of the first men of that capital are prominent and successful in the dissemination of the truths of phrenology. Among those who have greatly distinguished themselves, none, perhaps, has higher

claims to renown than the late F. J. V. Broussais*. His medical writings are found in almost every physician's collection. A Parisian author, of 1828, says of him: "Mons. Broussais is unquestionably the most remarkable medical writer of the present age. Splendid works, celebrated lectures, and a great number of proselytes, have, in a few years, spread far and wide his opinions." This distinguished light of science made an early examination of phrenology; and from the period of his doing so, to that of his death, he continued one of its most able promulgators. Holding an ardent and ready pen, Mons. Broussais always spread, with much facility, his views and reasonings before the reading publick. In 1831, upon the formation of a Phrenological Society at Paris, he was one of its primitive members; and the numerous papers he has penned, in relation to the science, are justly held in high esteem by phrenologists. His chief work, namely, "Cours de Phrénologie," has never been translated, we believe, and is certainly quite too little known in this country. It is an octavo volume of eight hundred and fifty pages, and is constituted of twenty lectures,

^{*} Prof. Broussais died at Paris, in November, 1838, at the age of sixty-six years.

delivered by Prof. Broussais to the Faculty of Medecine, of Paris, in 1836.

Mons. Broussais has assumed, as the basis of his work, Mr. Combe's Phrenology; and he has retained his classification, and generally, his views. But he has not been confined to these, nor has he limited himself merely to what he found in his model: on the contrary, his work is every where enriched by original views and elevated sentiments, always conveyed in that strong, yet lucid and beautiful language which the author so well knew how to employ with effect. His details of national characteristicks often denote acuteness of observation; and he returns, again and again, to the defects of the old systems of mental philosophy, as, in his progress, he is called upon to elucidate what those systems have never recognised, with a point, we had almost said severity, well calculated to cause them to be both noticed and remembered. The work in question also abounds in copious extracts from "Vimont's Treatise upon Human and Comparative Phrenology,"-of which more hereafter - which gives it a high additional value; as that work is rich in important material not elsewhere collected; and yet, from its great price, is but very sparingly known. In short, none can doubt that phrenology is largely indebted to Mons. Broussais, since his whole connexion with the science has shown him a close observer of

facts, and a clear and able reasoner. The following incident he relates, in his work, as one which aided in fixing his attention upon the science: "Before I had imbibed a taste for phrenology," says he, "I was one day in attendance upon a musick merchant. In the room there were forty portraits of musicians; and in all these heads the organ of time was well developed. This made such an impression upon me that I ceased not to think of it, during the day: and I said to myself, Gall is not a fool." In the sixth lecture of his course, after detailing many facts which had fallen under his own observation, bearing upon the point of which he was treating, he adds: "I assure you that it is not heedlessly, without reflection, without numerous observations, that I have ventured to stand forth in favour of phrenology. I have multiplied observations as far as it has been possible for me, before taking this step." Mons. Broussais, then, was not the convert of a day; nor the victim of an enticing theory; but in phrenology, as elsewhere, he felt and saw and reasoned his way up to conclusions he could no longer doubt: and hence it was, that he ever held himself equally aloof from the extremes of either party. In a discussion, at the Royal Academy of Medicine, of Paris, in 1836, his language was so clear on this point, that we quote his words: "I am not prepared to defend all the opinions either of Gall or Spurzheim, or of any other phrenologist. Many of the details of authors on this, and indeed on every other branch of science, are necessarily imperfect and inaccurate; but such an objection cannot invalidate its leading principles and conclusions. These have been deduced from a patient examination of facts, which no reasoning can gainsay, and which most satisfactorily establishes this important truth, that certain mental developments are always associated with certain cerebral formations. This 'empirick' fact is the foundation of all phrenological reasoning; and notwithstanding the indiscreet and ignorant haste of many disciples of the science, its essential doctrines are based upon the most incontestable observations."

We have already stated that Mons. Broussais' classification corresponds with Mr. Combe's: we should add that the numbered organs, also, are the same. He has given the organ of Alimentiveness the same location as Mr. Combe; and directly below this he locates the organ of "the love of life," which Spurzheim and Combe do not assign a place on the bust. They both, in their last editions, barely mention the organs as probably existent, at the base of the brain; yet the latter is not, in their opinion, discoverable during life. The former of the organs under consideration, we may observe here, if not considered as absolutely settled, is still treated as much more certain in this country than by the phrenologists of Europe. Indeed, we no longer

consider it doubtful; multiplied observations, on this continent, having satisfied our phrenologists of its accuracy. This organ was first suggested by Dr. Hoppe, a phrenologist of Copenhagen; and a letter from him, detailing his views on the subject, was received at Edinburgh, in February, 1825. Mr. Crook, also, an English phrenologist, had made the same discovery, independently of the researches of Dr. Hoppe, and in April, 1825, read a paper upon this organ, before the Phrenological Society of London. The suggestion of the organ of "the love of life," so far as we know, is due to Mons. Vimont. Broussais, upon its history, says: "This organ was proposed by Mons. Vimont; I speak according to his work, for I avow to you I have not ransacked all the annals of English, American and Danish phrenology, to test his claim to the originality of this idea, but he affirms it to be his." Both these organs are treated of more extendedly by Mons. Broussais than by his predecessors; and he has enriched his pages by copious extracts from Mons. Vimont, in relation to each. According to these, Mons. Vimont pursued, in regard to the organ of the love of life, the same course which had been pointed out and pursued by Drs. Gall and Spurzheim, namely, a total abandonment of all theory, and speculative dogmatism, and a rigid adherence to facts alone, as deduced from observations of nature. He carefully noted the character of various animals, not only of the same, but also of different races, in relation to this propensity, while living; and after death he compared the brains of these: and by the uniform conformity of one portion of the brain to the character thus previously determined, while in other parts there was great diversity of development, he satisfied himself that the organ had existence, and that these facts had fully established its location.

Mons. Broussais may be said to have systematized his work to a greater extent, perhaps, than those who have preceded him. In very many instances, after treating of an organ's individual functions and its locality, he has illustrated its effect, in various combinations, as well with those organs that directly aid its action, as with those whose tendency is to either modify or deflect, in some degree, those functions, from their direct line of action. To some of these he has applied the terms auxiliaries and antagonists, according to the nature of the influence he supposed them to exercise, relatively to the powers of the organ under consideration.*

^{*} One of the most constantly repeated complaints brought against phrenology, by its opponents, is, that the science did not primitively present itself to us perfect and mature, in all its parts, like the fabled Minerva from the head of Jupiter. That

We have several times had occasion to advert to the labours of Dr. Vimont. The name of this valuable contributor to phrenological science is occasionally found, in our phrenological books, in the English language, but he is rarely more than just referred to, without so much as an outline being given of what he has really accomplished. The Edinburgh Phrenological Journal has done its readers better justice, in respect to the labours of Mons. Vimont, than any other

this would have been, in some respects, at least, advantageous, it is not our province to deny; and perhaps as much may very safely be said of the remaining sciences, also; but why this singular complaint should rise up in judgement against phrenology, alone, is not so clear. True it is, however, that because phrenology is not a perfect whole, not only are all the settled features of the science questioned and denied, but this fact is made the ground of grave complaint against those who profess it.

A writer in the "Boston Quarterly Review," No. for April, 1839, may be said to belong to this class of reasoners. He assumes that phrenologists deny or neglect to recognise man's "personality," &c. The arrogant assumption of perfection belongs neither to philosophers or philosophy; and phrenologists, while they freely admit that they have not reached perfection, and have no expectation of doing so, still do not discard the utility of farther and constant investigation. The writer adverted to, had he read all they have done, in this way, would have learned that the subject of "personality" has not escaped the attention of all phrenologists. Broussais has devoted near fifty pages of his able work to ME, (personality,) the will, liberty, reason, &c., which the Boston critick evidently has not seen.

English work we have examined. Dr. Vimont was a physician of Caen, in France; and the seventh volume of the periodical just named, gives the following notice of him, as an extract from "Dewhurst's Guide to Phrenology": "Dr. Vimont was originally an opponent of phrenology; having attended Dr. Gall's lectures, at Paris, he left that city with strong prepossessions against his doctrine, and, on returning to Caen, prosecuted his researches with the express object of refuting them; but after the fullest investigation, his inquiries terminated in making him a thorough convert to the system, and in the formation of a splendid museum, containing more than two thousand sculls of the mammalia and birds; casts of brains, modelled in wax, and nearly three hundred original drawings, made by himself." Thus much of this naturalist's cabinet, which contained, indeed, a grand total of more than six thousand specimens. Of his work, namely, "Treatise on Human and Comparative Phrenology," the editors of the Edinburgh Phrenological Journal, while it was in course of publication, in 1832, thus spoke: "When completed, it will extend to two quarto volumes, accompanied by a splendid atlas, in folio, consisting of one hundred and twenty plates, and containing more than three hundred well executed subjects on human and comparative anatomy."

It will be observed that the labours of this naturalist are in a department peculiarly his own, namely, comparative phrenology. This is a field, broad and ample, indeed, and rich in material illustrative of mind; but still it has hitherto been greatly shunned or neglected. True, occasional glances have been cast in that direction; and sometimes a writer may have devoted a page or two, by way of digression, to surmises touching what might be achieved by appropriate research and labour - but nothing more. The language of Mons. Broussais, upon this point should not be lost: "Is it not," says he, "astonishing that we set so high a value upon comparative anatomy and physiology, and yet give no attention to the comparison of our cerebral faculties with those of animals? Gall uttered the same complaint; and yet Mons. Vimont is still the only one who has undertaken to supply the deficiency: but it is necessary to pass life in the midst of fields and woods, to pursue this study with success." Here, no doubt, is suggested the real difficulty: and what store of useful knowledge might some of our American philosophick woodsmen, the immortal Audubon, and Catlin, for instance, impart, upon this subject, had they but been attentive to this species of observations, during their long wanderings of years in our prairies and forests?





Chealdwell.



The labours of Drs. Gall and Spurzheim, at Paris, while they contributed so largely to the diffusion of phrenology in Europe, were destined, farthermore, to establish the first healthy and permanent growth of that seience in this country. It is to Prof. CHARLES CALDWELL, now of Louisville, Ky., that we are indebted for the first definitive promulgation of phrenology in the United States. It is eighteen years since this event; and during all that period Prof. Caldwell has not eeased to give the seience the full benefit of his active and superiour abilities. It has been the singularly happy fortune of this indefatigable philosopher to have effected more for the science, in this country, than it has fallen to the lot of any other single individual to achieve. Not, indeed, that he has toiled all this while, single-handed; for he has not. Others oeeasionally put forth an effort for phrenology, even at an early day, in different parts of the Union; but for a long period the burden of sustaining the new philosophy, in this hemisphere, rested principally upon him; and against his reputation, as a man and a philosopher, were pointed the countless thousands of witless effusions with which the vain and frivolous multitude of triflers, at one period, almost inundated our publick press.

It was in the summer of 1821 that Prof. Caldwell

attended the lectures of Dr. Spurzheim, at Paris. He candidly admits, says Dr. Andrew Combe, that he allowed himself to be persuaded to attend these, solely in the expectation that he would bring away with him more materials for ridicule. But the result was widely different from this anticipation. Of those lectures Prof. Caldwell says: "The clear and forcible exposition which Dr. Spurzheim made, connected with my own observations and reflections, soon produced in my mind a thorough conviction of the truth as well as the importance of the science, connected with a firm resolution to vindicate that truth, and to promote a knowledge of it, in my own country, with all the resources I could bring to the task."

So little had phrenological investigations commanded attention in some portions of the United States, previously to the arrival of Dr. Spurzheim in America, in 1832, that numerous persons, deemed well informed, even now constantly date the permanent introduction of phrenology into this country, from that period, and of course connect the event with the visit of Dr. Spurzheim to our shores. We have already stated that the science was deeply rooted in our soil, many years prior to this period, through the agency and care of Prof. Caldwell; and, as well to sustain and make good that assertion, as to do justice to the labours of this indefatigable pioneer,

we shall recount, somewhat in detail, and in chronological order, the most prominent of his multitudinous exertions.

. After hearing the lectures of Dr. Spurzheim, in the summer of 1821, as already related, Prof. Caldwell returned home; and in the winter of 1821-2, he prepared and delivered a brief course of lectures, upon the science, to his class in the Medical Department of Transylvania. This was the first phrenological course ever delivered in America; and every winter since that time the author has repeated that course, with such extension and improvement as unabating application, and the advance of the science, have enabled him to make.

In the Spring of 1822 he delivered a popular course of phrenological lectures to the citizens of Lexington, Kentucky;

In 1823, a like course to the citizens of Louisville, Ky.;

In 1824, the same in Nashville, Tenn.;

In 1825, another to the citizens of Baltimore, which led to the formation of a phrenological society in that city;

At the close of this course he, by invitation, delivered another in the city of Washington, which resulted in the formation of a phrenological society there;

Before this society, in 1826, he, by invitation, delivered another course of lectures;

In 1828 he extended his labours to New-England, and delivered his first course there, to a Boston audience, in that year;

In 1835 he delivered a second course in Louisville, Ky., and also in Nashville, Tenn.;

In 1836 he gave a course in Natchez, Miss., which was immediately succeeded by another at New-Orleans;

In 1837 he was invited to Philadelphia, where he delivered a course to a class of the Summer Institute; and

In 1839 he delivered, by invitation of the Phrenological Society of New-York, a course to the citizens of that commercial metropolis.

During all these multiplied oral teachings Prof. Caldwell's pen was no less active than his tongue. The following, so far as we have been enabled to ascertain them, are his publications upon the science.

In 1824 he published, by invitation of his class, a summary of his course of lectures previously delivered to them. This was reviewed in the Edinburgh Phrenological Journal, with marked approbation.

In 1827 a second, and greatly enlarged edition of this was printed, to which was prefixed, in the form of a preliminary discourse, extending to some seventy pages, a reply to Mr. Jeffrey's various slanderous but powerful attacks upon phrenology.

In 1826 hc produced two papers upon the Phrenology of the North American Indians, compared with that of the Caucasians, founded on an examination which he instituted in the city of Washington, of parties of Creeks, Cherokees, and Seminoles. second of these papers our author showed that, in phrenological development, the difference between the present race of North American Indians and a preceding race, whose seulls are found in the ancient tumuli of the west, is very great. From the size and warlike development of the heads of the present race, he drew the conclusion that they had, at a distant period, taken possession of the country, as invaders, and either exterminated their predecessors, or perhaps more probably driven them to the south, where they might have settled in Mexico; their heads bearing some resemblance to the heads of the present Mexicans. These two papers, as there was no phrenological periodical in this country, at so early a day, were published in the Edinburgh Phrenological Journal.*

^{*} The following passage, from one of these letters, gives so just a view of the radical difference between the Caucasian race and the American Indian, (whom Prof. Caldwell supposes to belong to the Mongolian division of the human family,) that we give it our readers entire. The facts it contains MIGHT be made

In 1829 he published a paper entitled "New Views of Penitentiary Discipline and Moral Reform." In this, the subject was treated phrenologically, and the entire paper was reprinted in Europe, with high encomiums, from the British and Scotch phrenologists.

In 1831 he wrote and published an essay on Temperament, considered phrenologically. This paper embraced the substance of three lectures which the

in the highest degree useful, in modifying the character of our Indian relations.

"The average size of the head of the Indian is less than that of the head of the white man, by the proportion of from an eighth to a tenth, certainly from a tenth to a twelfth part of its entire bulk. The chief deficiency in the Indian head lies in the superiour and lateral parts of the forehead, where are situated the organs of Comparison, Causality, Wit, Ideality, and Benevolence. The defect in Causality, Wit, and Ideality is most striking. In the organs of Combativeness, Destructiveness, Secretiveness, Caution and Firmness, the functions of which constitute the dominant elements of the Indian character, the development is bold. The proportion of brain behind the ear is considerably larger in the Indian than in the white man. The organ of Adhesiveness, in the former, is small.

"This analysis, brief and imperfect as it is, unfolds to us much of the philosophy of the Indian character, and enables us, in a particular manner, to understand the cause of the peculiar inaptitude of that race of men for civil life. For, when the wolf, the buffalo and the panther shall have been completely domesticated, like the dog, the cow, and the household cat, then, and not before, may we expect to see the full-blooded Indian civilized, like the white man.

"Of the mixt breed, which is very numerous, the cerebral

author had previously delivered; and it was published at the request of his class.

In 1832 he produced an essay for the Transylvania Medical Journal, on "Mental Derangement," phrenologically considered; and another, entitled, "Thoughts on true Epicurism." This last was published in the New-England Magazine, at Boston; the subject being treated upon the principles of phrenological science. In the same year he delivered, by appointment of the city of Lexington, Ky., an address on the centennial

development and the general character approach those of the white man in proportion to the degree of white blood which individuals possess. On account of the marked superiority of his intellect, a half-breed seldom fails to become a chief.

[&]quot;Of the full-blooded Indians generally, permit me to remark, that such is their entire unfitness for civilization, that every successive effort to mould them to that condition of life, more and more deteriorates their character. Of the mixt-bloods this is not true. Hence the only efficient scheme to civilize the Indians, is to cross the breed. Attempt any other and you will extinguish the race. To the truth of this the experience of every day bears ample testimony. The real aboriginal Indian is retreating before civilization, and disappearing with the buffalo and the elk, the panther and the grisly bear. Let the benevolent and enthusiastick missionary say what he may, the forest is the native home of the Indian. Remove him from it, and, like the imprisoned elephant, he loses the strength and loftiness of his character. He becomes a hot-house plant, and dwindles in all his native efficiences. This problem (for so by many it is considered,) is solved only, but can be solved easily, by the lights of phrenology."

anniversary of the birth day of Washington. In this address, though not of a character to be strictly phrenological, the author introduced that science as one of the great discoveries of the age, and very happily pointed to its important bearings and influences. During the same year, and at the same place, he delivered, also by appointment, an address upon "Intemperance," in which he gave a view of the phrenology of that vice. This production was favourably noticed by the late Dr. McNish, of Glasgow, in his "Anatomy of Drunkenness."

In 1833 he wrote two essays; one on "Moral Medicine," the other upon "The true mode of improving the condition of Man." Both these subjects were treated phrenologically. In another essay, written during the same year, and published in the New-England Magazine, upon the "Study of the Greek and Latin Languages," our author gave a phrenological analysis of mental cultivation. During the same year, in a review of "the Principles of Medicine," by Professor Jackson, of Philadelphia, and published in the Transylvania Journal, he retaliated somewhat severely upon the author for a wanton and feeble attack which he made upon phrenology.

In 1834 he published an address delivered, by request, to the Education Convention, held at Lexington, Ky., in November, 1833, on the subject of Physical

Education. The subject was treated phrenologically, with an ability which has already commanded extensive attention, and resulted in much usefulness. During the same year our author wrote and published two articles entitled "Phrenology Vindicated"; one of them in the first volume of "the Annals of Phrenology," (a periodical issued at Boston, Mass.,) in reply to an abusive attack made upon the science in the North American Review, which reply was written at the request of the phrenologists of Boston; the other published in the New-England Magazine, in reply to an anti-phrenological article in the same work. In November of the same year, he delivered, by appointment, at Lexington, Ky., an "Address upon Gambling," in which he gave the phrenology of that vice.

In 1835 he published, in the second volume of the "Annals of Phrenology," an article, also entitled "Phrenology Vindicated," in reply to an attack made on the science, by Lord Brougham. In the same year, and still under the same title, he wrote and published a reply to a very virulent attack upon phrenology in the "Boston Christian Examiner." Within that year, also, he delivered by appointment, and subsequently published, two addresses, both of a phrenological character; one at Nashville, Tenn., on "the Spirit of Improvement;" the other at Lexington, Ky., being a second Address upon Gambling.

In 1836 he delivered, by request, in Bloomington, Indiana, and which he subsequently published, an academical address "on Popular and Liberal Education," in which the subject was phrenologically treated.

In 1838 he published, in New-York, a small volume containing two essays; one entitled "Phrenology Vindicated, and Anti-phrenology Unmasked," being a reply to certain productions of Drs. Sewall and Reese; the other "the Phrenology of Falsehood and its kindred Vices." During the same year he delivered, at Jeffersontown, Ky., by invitation, an address upon "Education," in which the subject was treated phrenologically.

In the early part of the present year, (1839,) our author published, in pamphlet form, a letter to the editor of the American Phrenological Journal, Philadelphia, in which he has given a view of the true connexion between phrenology and religion. Of this last, some farther account will be found in our subsequent pages.

It will readily be seen that one who could devote himself to such a zealous and protracted course of publick exertion, for the advancement of a given branch of knowledge, would not be wanting in stimulus to private effort, to the same end. The detail of labour of this kind, performed by Prof. Caldwell, during the last eighteen years, it is, of course, impossible for us

to give: we only know that during that time he has written hundreds of letters in illustration and defence of the science, and conversed, during his various journeyings, with thousands of men of distinction from different parts of the country, upon the truths of phrenology, and their importance to mankind. His chief efforts have been for the diffusion of the science through the western and southern states, where the fundamental principles of phrenology are, at this day, and mainly through his means, much more generally understood than in any other part of our Union. The two principal points of his personal labours have been, first, in the Medical Department of Transylvania University; and now, (1839,) in the Medical Institute of Louisville, Ky. From these two points, through the ability and perseverance of Prof. Caldwell, has radiated, in all probability, a greater amount of phrenological knowledge than from any other score of points in the United States. But few of the foregoing publications were printed for sale; the great body of them having been, through the liberality of their author, distributed gratuitously, in the valley of the Mississippi, for the benefit and diffusion of the science of which they treat.

The names of Dr. John Bell and Dr. Benjamin R. Coates also belong to the early history of phrenology in this country. These gentlemen were of the small

number who, twelve years since, were found openly teaching phrenology in America, and breasting the flood-tide of scoffing, denunciation and invective with which both the science and its abettors were then every where assailed.

The brief career of Dr. Spurzheim, in America, has already been recorded: but that career though brief, was brilliant. The honours paid him while living, and to his memory when dead, will bear witness to future ages of the esteem in which his doctrines and his character were held. His short presence in Boston roused a spirit of phrenological inquiry in that city and vicinity, the effects of which will be long felt. Among the important consequences here adverted to, that of calling forth American editions of European phrenological books, may be considered as not the least important. Prior to this, the scarcity and great cost of such books had kept American phrenologists almost wholly ignorant of them; as they were possessed only by the few who commanded the means and enjoyed the facilities of importing them for themselves. The works of Gall, Spurzheim, the Messrs. Combe, George and Andrew, (the latter on Mental Derangement,) &c., have thus been brought within the reach of purchasers in this country, the Boston press having supplied the demand in good editions of these publications. We must except, of course, from this list, the great work

of Gall and Spurzheim, namely, "Anatomie et Physiologie du Système nerveux en général, et du Cerveau en particulier," which has not thus reached American readers, and is generally unknown, except by name, in this country. The "Treatise upon Human and Comparative Phrenology," by Dr. Vimont, to which we have frequently referred, is also greatly wanted. The Paris edition, we are informed by Mr. Combe, is exhausted, and the only French copy now to be had is the pirated edition of Brussels, with plates of inferiour execution: and we believe a translation of the text, though so badly done as scarcely to deserve that name, has appeared in English. A good translation of Prof. Broussais' "Cours de Phrénologie" is also loudly called for.*

The voluminous writings of Prof. Caldwell we have already cited. These, with one exception, are so many applications, and not text books of the science. In this latter department, however, we are not without other American authors. "Practical Phrenology,"

^{*}Since our remarks on page 96 were in print, we have been informed, by Loring D. Chapin, Esq., of New-York, that a full translation of these lectures was published in the London Lancet, in 1837. We have not seen the Lancet; but if this translation is what it should be, we hope the American press will speedily furnish an edition of the work.

by Mr. Silas Jones, was published at Boston, in 1836. Mr. Jones says he adopts the division of the Faculties made by Mr. Combe, and the numbering of the Organs of Dr. Spurzheim. The work, as its title imports, is designed for practical use; and in his preface the author rejects all claims to originality.

"Phrenology proved, illustrated and applied," by Messrs. O. S. and L. N. Fowler, and Samuel Kirkham, was issued at New-York, in 1837. In this work the classification is slightly changed from previous phrenologists; and Inhabitiveness and Concentrativeness are recognised as separate and distinct organs—as was previously done by Mons. Vimont.* In their preface the authors thus characterize their work:

"This volume is not designed to supersede the invaluable writings of Drs. Gall and Spurzheim, and of Mr. Combe, nor does it profess to be wholly original; but it does lay claim to many important improvements in the science of phrenology. These consist mainly in presenting many new, and (as the authors conceive,) useful views upon the subject; in bringing forward many new facts and the result of many observations and successful experiments, which serve as new proofs of the truth of the science and illustrations of its prin-

^{*} Vide note, pages 92 and 93.





Istunley Grimes.

Little of Hall & Mooney, Buffalo





ciples and utility; in supplying many gross deficiences of the other writers upon the subject; and, above all, in presenting the subject in a far more practical form than it has been heretofore given."

Prior, in point of time, yet differing, essentially, in character and object, was issued, at Albany, a volume of lectures upon phrenology, by Amos Dean, Esq., a well known and distinguished member of the bar of that city.

In the early part of the present year, (1839,) "A New System of Phrenology," by J. Stanley Grimes, was issued at Buffalo. Of his work the author holds the following language: "The principal object of this volume is, to lay before the publick the results of several years' phrenological study and observation. When I commenced teaching phrenology, I followed in the footsteps of Gall and Spurzheim. My only object was to disseminate, among my fellow countrymen, the sublime truths which were discovered by these illustrious men. I adopted their doctrines, and imitated, as well as I could, their manner of teaching and illustrating them. I also adopted their favourite maxim, that we should study things rather than words. I determined to admit nothing which was not based upon facts, and capable of being philosophically demonstrated. It was by observation that I first satisfied myself of the truth of the essential facts upon which the system of Spurzheim was based; and by continuing to pursue this same course I have been enabled, as I believe, to remodel and improve that system. Admonished by the history of the past, it is without any feeling of presumption that I present to the notice of the scientifick publick my New System of Phrenology; conscious that it must contain many errours which future experience and just criticism cannot fail to detect."

The changes and additions in this work are so considerable as legitimately to constitute them portions of the history of phrenology. That the science is yet in its infancy, and open to vast extension and improvement, we have the concurrent testimony of every writer who has studied and understood the subject. How far cach or any attempt at either the one or the other shall, at its promulgation, be deemed to have been successful, is not for us to decide: the province of the historian is confined to faithful and unprejudiced narration.

The classification of the phrenological organs, in this work, is claimed by the author as entirely new, both in its detail, and in the principles upon which it is founded. He says: "I find the cerebral organs of all animals evidently divided into three classes; each of which, commencing at the base of the brain with a sin-

gle organ, expands and proceeds upwards, receiving new additions as the animal rises in the scale of beings." The author's classification follows:

CLASS I.

Ipseal, or Self-Relative PROPENSITIES.

CLASS II.

Social, or Society-Relative PROPENSITIES.

CLASS III.

Intellectual, or Knowledge-Relative FACULTIES.

Each of these classes may be sub-divided into ranges or groups, to correspond with the progressive stages of animal character, from the lowest species of zoophites, that seem to claim kindred with the vegetable, up to man.

CLASS I. - IPSEALS.

1st RANGE.

1, Alimentiveness, 2, Destructiveness,

3, Combativeness.

2d RANGE.

4, Secretiveness,

5, Cautiousness.

3d RANGE.

6, Constructiveness, 7, Acquisitiveness.

4th RANGE.

8, Playfulness,

9, Perfectiveness,

10, Hopefulness.

CLASS II. - S O C I A L S.

ESTABLISHING GROUP.

- 1, Amativeness, 3, Inhabitiveness,
- 2, Parentiveness, 4, Adhesiveness.

GOVERNING GROUP.

- 5, Imperativeness, 7, Firmness,
- 6, Approbativeness, 8, Conscientiousness.

CONFORMING GROUP.

9, Submissiveness, 11, Imitativeness, 10, Kindness, 12, Credenciveness.

CLASS III. - INTELLECTUAL.

LOWER RANGE.

- 1, Individuality, 6, Weight,
- 2, Chymicality, 7. Colour.
- 3, Language, 8, Order,
- 4, Form, 9, Number.
- 5, Size,

MIDDLE RANGE.

- 12, Time, 13, Tune. 10, Direction,
- 11, Eventuality,

UPPER RANGE.

14, Comparison, 15, Causality. "This division into three classes, Ipseal, Social and Intellectual, is founded," says the author, "upon Anatomical considerations, and on the Natural History of Animals. The spinal cord," he continues, "is in three columns, anteriour, middle and posteriour; and Mr. Charles Bell has demonstrated that all the nerves which proceed from one column are destined to perform one class of functions. The nerves from the anteriour column are for volition; those from the middle for respiration and nutrition; and those from the posteriour for sensation.

"The three powers, namely, Alimentiveness, Amativeness and Individuality, which constitute the foundation of the three classes, are manifested by all animals. These organs are found at the very base of the brain: Amativeness at the lower posteriour, Alimentiveness at the lower middle, and Individuality in the centre of the lowest front of the brain.

"The powers of the mind are divided into two grand orders, namely, Propensities, or blind impulses, which are the causes of all actions; and Intellectual Faculties, that acquire knowledge, and point out the means by which the propensities may be gratified. If we had no propensities we should do nothing; if we had no intellectual faculties we should know nothing."

This classification, it will be readily seen, by all who are familiar with the subject, is wholly variant

from any and all that had gone before; and the author details his views of its accuracy, in conformity with nature, and its great usefulness in studying the science, with ability and minuteness. By reference to the classifications of Spurzheim and Combe, in the previous pages, it will be seen that our author has materially varied the nomenclature; and for this he has given his reasons; commenting, in detail, upon each change introduced, and exhibiting the motives which have conduced to its adoption. Of the ranges in this classification, our author continues:

"A knowledge of the natural history of animals, in the present improved state to which the great Cuvier has brought it, would be highly useful to phrenological students, and enable them better to appreciate this arrangement of the lpseals; but it is sufficient for our present purpose to state that the more perfect animals may be divided into the Carniverous, Herbiverous and Rodentia, on account of the different modes in which they obtain their food; and that the first, second and third ranges of Ipseals exactly correspond with this division of animals. The carniverous animals are distinguished for the manifestation of the first range, which may therefore be denominated the carniverous range; the herbiverous animals, for the manifestation of the second, which may be called the herbiverous range; and the rodentia for the third, which may be

named the rodentia range. The fourth is peculiar to man, and may therefore be denominated the human range."

The imperfect state of phrenology has been already mentioned. Broussais thus remarks upon it: "Observation, in phrenology, is full of interest; and it is this which causes me to hope that the voids of this science will be made to disappear. Every science, in its infancy, offers many of these; but, far from being diseouraged, those who cultivate it, from choice, should redouble their efforts to overcome them." Upon the same subject Dr. Spurzheim says: "Let every one earn the merit he deserves. Also, those who add to our discoveries, have a just claim to every idea of improvement, and I shall always be disposed to acknowledge it with a feeling of gratitude." It has long been the current opinion of phrenologists that there are organs still undiscovered, in the brain; and also that there are probably some there so situated that they never can be known; while, as we have seen, some have been suggested which are now regularly noted in phrenological treatises, but not treated as established. Mr. Grimes, in connexion with the multitude of new views with which he has clothed the various established portions of the science, has introduced and described two new organs which he believes he has discovered, by observation; and a third, the existence of which

had previously been suggested, he has adopted, though with entirely different and original views of its character and functions - the original location, only, being retained. These organs ho has named as follows: Pneumativeness, Chymicality, and Sanitativeness. The first of these, says the author, "bears precisely the same relation to the lungs that Alimentiveness does to the stomach. When the lungs are not supplied with air, a disagreeable feeling of suffocation is experienced, analogous to the feeling of hunger when Alimentiveness is not gratified." The second is defined "the perception of those chymical qualities of bodies which affect the senses of taste and smell. If we admit that the senses do not perceive, but only convey impressions, we shall be obliged to acknowledge that this faculty depends upon an organ of the brain." After detailing his experience, in regard to this organ, the author adds: "These observations naturally suggested the idea that the propensity to acquire food, and the perceptive faculty which ascertains the quality of food, depend on two separate organs." The third "is the propensity to preserve the bodily constitution from injury. When disagreeably affected, it produces the feeling of bodily pain; and when agreeably affected, it communicates a feeling of bodily ease." We have said, of this organ, that its existence had previously been suggested, though it was defined

with functions radically different. Spurzheim thus speaks of an "organ of the desire to live." "It is highly probable," says he, "that there is a peculiar instinct to live, or love of life, and I look for its organ at the basis of the brain, between the posterior and middle lobes, inwardly of combativeness." Mr. George Combe speaks of this as the "organ of the love of life;" and adds that he deems it "highly probable there are a special faculty and organ for the Love of Life." Dr. Andrew Combe, also, in a paper in the Phrenological Journal of Edinburgh, (Vol. 3, 1826,) states the fact of a dissection in which he found the convolution of the brain in question truly enormous; and that a constant dread of death was well known to have constituted a very prominent feature in the character of the person to whom this brain had pertained. Broussais, in treating of this organ, quotes Dr. Vimont, at length. The views of this author, who was also the original suggester of the organ's existence, we have already detailed, at pages 100 and 101 of this work. Mons. Dumoustier, also, as quoted by Mons. Broussais, has made remarkably extensive observations upon this subject; and he deemed it well settled, by facts, that the organ, in general, is but feebly developed in suieides, while it is very large in those who think only, as it were, of preservation - such as are profoundly egotistical, and are constantly occupied with themselves; whose perpetual refret is, live! help! protect me! Hypochondriacks generally belong to this class of persons.

The suggestion, then, and pointing attention to this organ, are by no means new; but Mr. Grimes supposes the definition of its functions, by his predecessors, to be faulty and erroneous. He says: "The lower animals do not protect their bodies from injury because they understand the importance of health and vigour; they do not, by reasoning, infer that wounds will endanger life, or disqualify them for the enjoyment of happiness, any more than they do that abstinence from food, or air, will be fatal; but they are endowed with this propensity, which impels them to avoid bodily injury." Of the organ of the love of life, or rather of its assumed functions, he says: "It is a propensity conjectured by some phrenologians to exist. I must confess that I can see no good reason for admitting such a distinct power. I consider the love of life to be the result of hope and reflection; and this is confirmed by the fact that suicides generally have small Hopefulness. Perhaps Sanitativeness, by giving a desire to preserve health and soundness of body, and aversion to personal injury, sometimes produces effects in animals that are mistaken for a love of life; but Sanitativeness is manifested powerfully by animals so low in the scale that they cannot be supposed to know

that they enjoy life. There are doubtless organs undiscovered, particularly at the base of the brain, which relate to the corporeal necessities; but I shall treat only of what is believed to be discovered, and leave the great field of conjecture to those who are better qualified to cultivate it."

Our author dwells upon the importance of employing different terms to designate propensities, feelings and actions; and this leads to a reformation of the names of some of the organs. "Reverence," for instance, is a feeling, and is the effect of a propensity to submit. So, also, is "Veneration"; but worship and submission are actions which follow the feelings. We should therefore have one name for the propensity, another for the feeling, and a third for the resulting actions; and this rule he applies alike to each of the propensities. He denies the distinction between propensities and sentiments; and considers all the moral powers as purely propensities as the animal powers.

Original and peculiar views of our author will also be found in his definitions and explanations of the organs of Language, Direction, Playfulness, Perfectiveness, Hopefulness, Firmness, Submissiveness, Kindness, and Credenciveness; as well as in his reasons for believing that the cerebral organs increase more, by exercise, than any other organs of the system. The

same is true, also, of his remarks upon the importance, to health, of the Corporcal Range; and in those, still more extended, upon the resemblance of children to either parent, and the possibility of determining, in strongly marked cases, and without seeing the parents, to which of them the child's head bears the strongest resemblance. The possibility of doing this is based upon certain generally uniform differences in the size of particular cerebral organs, in the different sexes.

The subject of Temperaments, also, has received detailed and peculiar attention, at the hands of Mr. Grimes; and in his chapter upon "Phreno-physiology," under which head he "includes all the appearances of the body and face which indicate character, by reason of their harmony with the Phrenological Organs," much that is new and striking will be found.

From what has been shown it will be readily seen that the extension and advancement of the science attempted by Mr Grimes is neither trifling in amount, nor immaterial in its consequences; and that, whatever may be the decision of future experience thereon, it necessarily constitutes a portion of the history of phrenology.

The work, upon its appearance, very naturally produced some interest among phrenologists, and they received it, in the first instance, without either condemnation or approval; but with the intention, in this, as

in all previous cases of advancement, to test its accuracy by careful observation. In order that this might be the more speedily and extensively accomplished, and that both hemispheres might be simultaneously engaged therein, the Executive Committee of the "Western Phrenological Society, at Buffalo," at the meeting of that body, on the 2d of March, 1839, adopted the following Preamble and Resolution:

"Whereas, an entirely new system of elassification of the phrenological organs, and several other important improvements, should future observations confirm their correctness, have been made by J. Stanley Grimes, in his 'New System of Phrenology'; and whereas, it is important to the interests and diffusion of Phrenological Science that observations, upon these points, be multiplied as rapidly and as extensively as possible, therefore

"Resolved, That the Corresponding Secretary transmit, at his earliest convenience, and in the name of this Society, a copy of 'Grimes' New System of Phrenology,' together with a copy of this preamble and resolution, to each of the Phrenological Societies of Edinburgh, London, and Paris."

We have previously adverted to the presence and labours of Mr. George Combe, in this country. He has completed two courses of lectures in New-York, two in Philadelphia, one in Boston, one in Hartford;

and we learn that he contemplates still others at Boston, Albany, &c. The lectures of one of these courses, namely, the last one in New-York, were reported, in full, by Andrew Boardman, Esq., Recording Secretary of the New-York Phrenological Society. These lectures Mr. Boardman has given to the publick in a volume; having first obtained the sanction of their author to the general correctness of his text. They are very fully illustrated with wood cuts; and he has prefixed to them a sketch of the rise and progress of phrenology.

Oceasional articles of a phrenological character, have appeared, from time to time, in various American periodicals, from the day phrenology was introduced into this country, to the present time; and as early as 1833, the experiment was tried of establishing a purely phrenological periodical in the United States. In October, of that year, the "Annals of Phrenology" was commenced at Boston, Mass. The work was issued quarterly, and was conducted with ability; some of the first phrenologists of this continent having been among its contributors. The publick mind, however, in this country, was not at that time sufficiently awakened to the subject to obtain for the work much circulation, beyond the ranks of professed phrenologists; and it was discontinued, we believe, at or about the close of the second year, for want of support.

In September, 1838, appeared the first number of "The American Phrenological Journal and Miscellany," a monthly publication, issued at Philadelphia. A circumstance coupled with the conception and first issue of this work, from its consequences, requires to be noted. The prospectus of the work contained the following paragraph:

"The religious character of the work will be decidedly evangelical; for one prominent object in giving it existence is, to wrest phrenology out of the hands of those who, in ignorance of its true nature and tendencies, suppose that they find in it an instrument by which to subvert the truths of revealed religion, and loosen the bonds of human accountability, and moral obligation."

The insanity of assuming that phrenology was in the hands of those who were ignorant of it, though it argued little for the clearness or depth of the mind that conceived it, was passed over without comment; but not so the remainder of the paragraph. The charge that those in whose hands phrenology was, were wicked or unworthy persons, was not calculated to gratify the great body of American phrenologists; nor did those who had been longest in the field, fighting the battles of the science, and defending its truths against the mingled assaults of all its foes, deem themselves deserving such distinction, from one who was,

as it were, but just enrolled in the phrenological ranks. That veteran in phrenology, Prof. Caldwell, with whose valuable phrenological labours we have already made our readers acquainted, in the prefatory note to his "Letter to the Editor" — published in pamphlet, at Louisville, Ky., the present year — thus comments upon the passage in question:

"The notion avowed in this paragraph appeared to me objectionable on a two-fold ground. In the first place, though phrenology, by demonstrating man to be constitutionally a religious being, favours the principle of catholick or universal religion, it does not countenance any one specifick form of religion, as such, more than another, except so far as one form is truer and sounder than another. There is nothing in it, therefore, that can be correctly pronounced 'decidedly evangelical,' in the legitimate meaning of that expression. On finding the expression, therefore, in the Prospectus of the Journal, a suspicion took possession of me, that it was employed as a lure, to collect subscribers and conciliate patrons to the work by words and sounds, instead of facts and matter; and, worse still, by covert artifice, instead of open honesty. Regarding such a measure, in behalf of phrenology, to be intellectually unnecessary, and morally unsound, I declared my disapproval of it, and added, that, unless some alteration in the matter were made, or a satisfactory explanation given, I must not be expected to be friendly to the Journal. Nor was this the only ground of my objection.

"A menace was uttered against those who had previously been the advocates and propagators of phrenology in the United States, and a proclamation issued, as if from the judgement seat, that the science was to be henceforth 'wrested from their hands,' because they had attempted to make it an 'instrument by which to subvert the truths of revealed religion, and loosen the bonds of human accountability and moral obligation.'

"Now, as none of these phrenological assailants of morality and religion were here designated by name; and as I most assuredly knew of no such unprincipled and reckless offenders as were here thundered at and threatened—as this was the ease, I supposed, and had a right to suppose, that the denunciation was wholesale, and that all American phrenologists were to be ousted by the lump, to make room for some new-fangled 'evangelical' sect, who were hungering and thirsting for the 'spoils of victory' which had been won by their predecessors. I considered myself, therefore, as one of the party about to be ejected. And had the ejectment been attempted on intellectual ground, without any slanderous imputation on morals, the design against the corps to which I belonged would have

given me no concern. With whatever resolution I might have endeavoured to retain my own place, and to aid my associates in the retention of theirs, the loss of position would have neither discouraged nor offended me. Considering it but an event in the fortune of war, I would have taken measures for its recovery, or remained patient under the loss. But to be proclaimed a foe to morality and religion, and therefore to all the benefits and blessings of social order, and thus to lose at once both place and character, amounted to an evil not to be altogether contentedly borne. Hence I calmly but firmly remonstrated with some of those concerned in the publication of the Journal, and cherished a hope that the exceptionable clause in the prospectus would be changed.

"But when the first number of the work appeared, I found the evil, as respected myself, very materially aggravated. Not only was the objectionable passage in the prospectus retained; in the 'Introductory Statement' to the number, I was personally, in no very delicate or equivocal terms, alluded to, as being unfriendly to the Journal, and even threatening war against it, on account of the religious character it was to bear. In simpler terms, I was virtually represented as an enemy to religion.

"Being in Philadelphia not long after the appearance of this assault on my character, I had an interview

with the editor of the Journal, conversed with him calmly, and I trust courteously and reasonably, respecting the matters in controversy between us, and did not find, from anything expressed by him, that our opinions in relation to them were essentially different. That all mistakes on the subject might be in future avoided, I furnished him with a note, containing my views, explicitly stated, respecting the connexion of phrenology and religion, and requested its publication. My request was complied with; and in number three of the Journal my note made its appearance. And had it appeared either without comments, or with well-founded and fair ones, there, as far as I was concerned, the matter should have ended.

"Such, however, was not the case. The paper was accompanied by editorial notes and remarks as groundless in themselves, as they were unfavourable to me. Added to other exceptionable points in them, an attempt was made, by their author, to show, without a shadow of foundation, that, as respects the relation of phrenology to the christian religion, there exists between the sentiments of Dr. Spurzheim and Mr. Combe, and myself, an essential difference. And that the productions of those writers testify to a more radical, close, harmonious, and friendly connexion between phrenology and christianity than mine do.

"To those indiscreet remarks from the pen of the

editor, the following letter is a plain reply. And as I feel no apprehension of being in any way injured by the remarks, the reply is intended much more for the benefit of their author than of myself. It is designed as a warning to him, by which he may profit, if he be as judicious as I trust he is. He is a young man, a young writer, a young phrenologist, and a young editor. Let him be modest, therefore, as well as cautious of handling edge-tools, until he shall have learned to use them with dexterity, and to guard against the injury and hazard of their misuse. Failing in this, he will be much more likely to do mischief to his own person, by their recoil on himself, or by their being turned against him by a practiced hand, than to injure those against whom he may unskillfully employ them.

"Without the slightest feeling of personal unkindness towards the editor, and with every disposition to
contribute, as far as practicable, to the patronage of
his Journal, which I believe will minister very profitably to the cause of truth, I tell him plainly that he
has done me wrong—unbecoming as well as flagrant
wrong. However inefficient and unequal to my wishes
my services may have been to phrenology, they have
been faithful and fearless, long continued and unflagging. For the last eighteen years, in sickness or in
health, in good report or bad, my zeal on the subject
has never abated, nor have my exertions in some way

known a day of idleness. Within that period I have written and published not a little, conversed much, and delivered I think forty courses of lectures, (perhaps more,) to many thousands of listeners. In relation to place, those courses have extended from Boston to New-Orleans, and been held in most of the large and several of the smaller intermediate cities and towns. During these toilsome journeys and performances, (for they were toilsome,) I have laboured for the science many more weeks than the editor has days - probably even more days than he has hours. And throughout this arduous and protracted series of action, I have never failed to maintain, often with great earnestness, the fundamental and immutable friendliness of phrenology to religion and morality, human aggrandizement, and human happiness. These things moreover, were done, when the publick was actively and bitterly hostile to phrenology, and when the American press and the American pulpit were uttering, alternately, thunders and scoffs against the science, and often invectives and abuse against myself.

"And, as far as the editor is concerned, what, for this toil and trouble, in behalf of the science, under whose triumphant banner he has lately enrolled himself—what, I say, have been the approbation and reward I have received? The answer is plain; and whether creditable or the reverse to the editor, let others decide."

All this, so pointedly true, in the case of Prof. Caldwell, was no less applicable, in a greater or less degree, to every other phrenologist in America, in proportion as his labours had been more or less protracted and efficient. Many, therefore, beside Prof. Caldwell, felt most deeply the injustice thus inflicted; but, although some complaints were uttered by them, there would seem to have been a species of implied admission, on their part, that to the veteran pen of Prof. Caldwell should be assigned the task of a formal de-The confidence thus manifested in this philosopher, while it is justified by all that is known of him here at home, is fully sustained by the remark of a distinguished European phrenologist, made to us but a few months since, namely, that he had been in frequent correspondence with Prof. Caldwell, for fourteen years, and had never yet detected his vigorous pen in a false position.

It is now more than twelve months since the Journal in question, was commenced: it is still continued, and better counsels seem recently to have prevailed in its conduct and management. In the prospectus for the second volume the censurable and hostile arrogance we have quoted no longer finds a place; and the work

is steadily acquiring the confidence even of those who, as a body, it once averred were in possession of phrenology, in this country, while they were ignorant of its true nature and tendencies, and out of whose hands it was the alleged object of the Journal to 'wrest' the science. The able and efficient pens of some thus unwisely denounced, and among these is included that of Prof. Caldwell, now supply the most useful and able original articles which adorn the pages of this publication.

Besides this, there are several other phrenological periodicals, all published and sustained by the phrenologists of the old world. The Edinburgh Phrenological Journal, already more than once referred to, was commenced at Edinburgh, in 1823, and was the first periodical ever issued, devoted particularly to this science. It was mainly through the pages of this work - which for ability, had few superiours - that the multitudinous attacks upon phrenology, with which all Europe was at one time rife, were replied to, and disposed of, by all that portion of our transatlantick phrenologists who made the English language their medium of communication. That work has, within a few years, been transferred to London, where it is still continued; and is in the enjoyment of an enviable reputation, both for candour and ability. The past numbers of this work

are highly important, for the diversity and character of the information they contain.

The Phrenological Society of Paris, a few years since, established a Phrenological Journal, which was issued periodically, and was conducted by a committee of the members. It was able and fearless in its course: whether still published we are unable to state. Another periodical, namely, "La Phrénologie," was in course of publication, at Paris, a few months since, then in its second year, and we have not heard of its discontinuance —but we never saw it, nor do we know more of the work than its name.

There remains but the Danish Phrenological Journal to be mentioned. This is published at Copenhagen, where it has been some years established, under the editorial charge of Professor Otto, a gentleman extensively known to the learned world. He has long been a medical professor, at Copenhagen, where he has conducted a Medical Journal. The Phrenological Journal, under his guidance, it is conceded, by those who have been its readers, has been an able and efficient publication, of extended usefulness.

Of the means employed against phrenology, and the manner of their employment, in both hemispheres, it is just and necessary that we speak more in detail than we have hitherto done. To recount all these would be

to fill many volumes; but specimens are necessary, as rightfully belonging to our history, no less than to justify the strong language of condemnation which they have so often elicited, from candid inquirers after truth. The fate of phrenology, in this particular, has been but that of the other sciences that arose before it. "The history of every age has demonstrated that every remarkable discovery has had the misfortune to be persecuted. Whenever it has been impossible to attack the principles of a doctrine, the attempt has always been made to render its nature suspected. Ignorance, prejudice, and not unfrequently, bad faith, have ever endeavoured, although in vain, to combat the greatest truths.

"The philosophers of the different schools of Greece accused each other of impiety. The novelty of the opinions of Pythagoras was the cause of his expulsion from Athens; and those of Anaxagoras consigned him to a prison. Democritus was treated as a madman by the Abderites; and Socrates, for demonstrating the unity of God, was condemned to die by poison.

"The same injustice has been inflicted on human reason in every age, and among every people. Not a few individuals, who distinguished themselves for extensive knowledge, in the fourteenth century, were condemned to death as magicians and sorcerers. To what disgraceful treatment Galileo was subjected, for

having proved the rotation of the earth! What a virulent warfare was urged against innoculation, and the discovery of vaccination! Varolius, for his great anatomical discoveries, was treated by Silvius, himself an eminent man, as the most infamous, most ignorant, and most insensate of men! Harvey, for maintaing the circulation of the blood, was attacked as a visionary and impostor! The physical truths announced by Linnæus, Buffon, Bonnet, &c., were held up as so many maxims of impiety, destined to uproot, entirely, religion and morality! The same, or nearly the same, has been the fate of Gall's discovery. It seems as if nature had subjected all important truths to persecution, that they might be more firmly established and consolidated; since it has always happened that the sophisms, arguments, and other weapons directed against demonstrable truths, have been, at last, dispersed like dust before the wind.

"The history, moreover, of every age and of every science has shown that the same opinions were at one time regarded as dangerous, only because they were new, and at another as useful, only because they were ancient; and that man has, at one time or another, made an object of scandal of every thing. But, as St. Bernard observes, we must judge suitably the scandal of the ignorant and that of the Pharisees. The former utter scandal from ignorance, and the latter from a

perverse mind. Malebranch says, that it is not persons of true and solid piety who condemn new truths, but the superstitious and hypocritical: the superstitious from an unworthy fear; and the hypocritical make use of the semblance of holy truth, to oppose, for sinister purposes, the progress of new truths. The latter, in their hearts, often laugh at everything which the world respects, and are in fact the most formidable enemies to truth."

We have adopted the above somewhat protracted quotation from the works of Professor Uccelli, of Florence, as translated by the editors of the Edinburgh Phrenological Journal: and we have done so, as well from the intrinsick value of the views and illustrations it contains, as from the important fact that its author lias, himself, been made to feel the persecuting force of the strong arm of power, wielded in the cause of bigotry, by reason of his belief in the truths which phrenology has disclosed. We have already seen that theological considerations caused the suppression of Gall's lectures at Vienna; and through the like source, though not quite so distinctly avowed, at a subsequeut period, the same result was obtained at Paris. This latter event occurred in 1824. Two years after this, namely, in 1826, Professor Uccelli,* of Florence,

^{*} Author of the copious extract we have just given.

published a large work upon the human frame, in which he recognised the phrenology of Gall and Spurzheim. The sequel is perhaps best told in the following letter from one who avows himself not a phrenologist. We copy it from the Edinburgh Phrenological Journal, where it stands credited to the Morning Herald.

FLORENCE, Oct. 18, 1828.

"The discussions which occupy all parties here will, I dare say, reach England. The dismissal of the Professor of Anatomy at the Medical College, is a sad evidence of the intolerant, persecuting spirit which still rules among the upper powers, and that in the most liberal part of Italy. Not that you in England have any right to wonder, for the world does not forget the storm and the clatter, and the fierceness and the bigotry, which pursued Mr. Lawrence some time ago, when somebody or other chose to deduce materialism from his lectures. The accusation against Professor Uccelli is, that he preached the doctrines of Gall and Spurzheim - in other words, heresy, necessity, materialism, protestantism, atheism, and the devil, - so, when the howl of ignorance and barbarism begins it is easy enough to find victims. The first point is for those knaves who set on the howlers to cover themselves with the proper mask, and to swcar they are influenced by nothing less than a love of virtue and religion. Uccelli published, in 1826, five volumes on the Organization of the Human Frame. His reputation, as a physiologist, stands second only to that of Vacca of Pisa. The fourth volume treats of the anatomy of the brain, and may be deemed a defence of the new theory. The discussion is carried on throughout, in a mild, modest, philosophical spirit; and whatever may be thought of his system, nothing can be urged against his manner of treating it. I am no convert to the doctrine of the twenty-seven departments, or boxes of organs, each separate and distinct; but I honour the man who carries on the duty of investigation in a frank and fearless temper, and am surc mankind will be greatly served by the result, be it what it may. If there be any part of the field of science in which the whole of the human race are deeply and directly interested, it is in this - that a correct knowledge be obtained of the structure and functions of every part of the human frame. Uccelli is a dexterous controversialist, and was yet more redoubtable as he offered to meet his opponents even on what they deemed their vantage ground, and reconcile Gall with St. Augustine - the teachings of anatomy with the Pope's bulls - and experimental physiology with the faith of the Catholick Church. The priests, however, liked no such ally - they cannot be better off by discussion - they may be worse off; and he who is in a rotten ship would be a fool if he brewed up a storm. But in the meanwhile, a pamphlet, of furious invective against the Professor, is published anonamously, but was undoubtedly traced to the Medical Sub-Professor, in the same College - one Lippi, who owed his situation and advancement to Uccelli, and availed himself of his intimacy, first to seduce Uccelli's wife, and then to traduce his character. What does Uccelli do but cite Lippi before the tribunals, for defamation? and the court decides that he shall be temporarily suspended. Uccelli, indignant at such a result, proffered his resignation to the Grand Duke, alleging that he could not possibly continue to be the colleague of his slanderer and betrayer. But the Grand Duke did not care to trouble himself about the matter, and would not accept Uccelli's resignation; and thus the affair seemed to rest: but now appears another pamphlet, written by a meddling professor of Lucca, (Grimaldi,) defending Lippi, and holding up the opinions of Uccelli to the execration of all devout Catholicks. The pamphlet reached the Palazzo Pitti, and dire, indeed, was the shock and the horrour produced in the minds of the three Grand Dutchesses, who had no notion that such damnable and devilish notions as those of Uccelli had any existence in their states. These ladies -

pinks of piety, and pionys of faith—who scarcely ever take a ride without eramming their carriages with wax candles to present to some Madonna whom they visit on their way—those fair and gentle ladies hurry, with uplifted hands, long faces, and noisy tongues, to the Grand Duke, and move him, at last, to refer Uecelli's work to the Theological College, of Pisa. The College condemned it, as a thing of course, and Uecelli is sent a begging.

"Two of the Bologna professors have given similar umbrage by preaching fatalism: any word will do for a persecutor, particularly if nobody understands its meaning. Their names are Oricoli and Tommasini. Cardinal Opizoni sent to them the following polite message: 'I beg to apologize for the trouble l give; but as all mankind are not as enlightened as you, you will be so good as not to scandalize them by preaching the dangerous and immoral doctrines of Dr. Gall:' and the professors, not less courteous, replied that they were obliged by the polite interference, with which they should comply; but they have not complied, and a proceeding is ripening for deposing them. It is known that both Lippi and Grimaldi, who have been fanning this flame of persecution, have not the wretched excuse of the ignorant and fanatick - they know better; but in Italy it is difficult for publick opinion to apply its scourges for the punishment of the

vile, or to stretch out the encouraging hand for the protection of the injured." *

But, while, as we have seen, in Papal countries, and by Papal ecclesiasticks and ministers of the laws, phrenology was held to be most dangerous; and was condemned as leading to heresy, necessity, materialism, protestantism, and so finally on "to the devil," yet in the protestant English Islands, and in America, a different, though certainly no less unfavourable view of its character and effects obtained, with the theolo-

^{*}In the case of Professor Uccelli, persecution did not cease, even at his death, which took place in 1832. Mons. Cassimer Broussais, of Paris, as quoted by Professor Caldwell, thus notices this event:

[&]quot;That physician, (Uccelli,) of extensive knowledge, of the highest skill in the anatomical sciences, filled with the love of truth, and with independence of character, had composed an important work, in which he gave an exposition of the doctrine of Gall, and supported it by observations. A blind fanaticism saw, in that profound and conscientious treatise, a blow directed against those superstitions which it was interested in maintaining; and it resolved to embitter his life. Condemnation of his works, deprivations - nothing was spared to afflict and humi-* * * * Even after death, the same power which had persecuted him during life continued to pursue him. The censorship prohibited the publication of biographical accounts of him, and suppressed, in a notice which was purely necrological, a passage which stated that the students had accompanied his body to the grave. The young men intended to perform a funeral service in their church; but they were prohibited from doing so, and even from asking permission!"

gians. In all these, while the publick press loudly denounced the science as a heresy of dangerous import, and one, therefore, we infer, not, in this case, suspected of leading to Protestantism, the sacred desk has been made the theatre of studied assault upon it, in almost every variety of form, from the dark and wily insinuation, half threat, half persuasion, to one wideweltering rhapsody of condemnation.*

In 1837 the attention of the members of the London Phrenological Society was called, by its President, to a work by the Rev. Mr. Taylor. This production, the Rev. gentleman, in his advertisement, showed he had intended as a work to put "young persons upon their guard against the wicked doctrines of phrenologists, as well as those of geologists." †

^{*} Examples from oral communications can rarely be obtained, and of course will not be expected here; but many will be able to verify the truth of our position by their own personal experience. Numbers in this city, in common with ourselves, were present, but a few months since, when a studied and laboured assault upon phrenology was made by one of our clergymen, from his own desk, and in pursuance of a previous notice which he had himself given. Parallel cases have not been of uncommon occurrence.

t Here we find Phrenology and Geology placed side by side, and classed together, by the Reverend author; yet this is only done the better, if possible, to detract, thereby, from the character and credibility of both. Archbishop Whately, in his lectures upon Political Economy, holds the

The language of Dr. Ryan, in his Manual of Medical Jurisprudence, is wholly explicit. It follows: "The doctrine of the materiality and mortality of the soul, which is that of Materialism and Phrenology, should forever be exploded as totally false, and unworthy of all regard, as subversive of the fundamental principles of all religions, as introducing civil anarchy into the political economy of legislation, as substituting disorder for harmony, despair for hope, and eternal darkness

following language: "That Political Economy should have been complained of as hostile to religion, will probably be regarded a century hence, (should the fact be then on record,) with the same wonder, almost approaching to incredulity, with which we, of the present day, hear of men sincerely opposing, on religious grounds, the Copernican system. that the erroneous principle - that of appealing to revelation, on questions of physical science, -has not yet been entirely cleared away, is evident from the objections which most of you probably may have heard to the researches of Geology." This was pronounced in 1831; and the notes of condemnation, here referred to can scarcely be said to have died entirely away, even yet. So late as November, 1837, -less than two years since - Blackwood's Edinburgh Magazine, in an article studiedly defamatory of the "Scientifick Association," which had just then held its annual meeting at Liverpool, averred that its tendency was "to set scripture and science at variance, and to assert a silly superiority over prejudice, on the silly ground of believing the nonsense of some rambling geologist, in preference to the declared and precise language of inspiration." This is succeeded by scripture quotations which the writer supposes at variance with geological discoveries; and upon that

for everlasting light. * * * * Such are the consequences naturally resulting from the principles laid down in phrenological writings."

Stimulated by the boldness and unqualified character of these European denunciations of phrenology, one class of its opponents, in this country, hastened to respond to sentiments they felt no hesitancy in adopting as their own They consequently, in opening the conflict here, relied upon the efficiency of the same

seience he finally sums up thus: "It is to be observed, in the entire of this subject, that of all the seiences, geology, is at present least worthy of the name of a science. " " Yet of all the sciences it is already the most presuming, and every trivial gatherer of pebbles fancies himself master of a theory of the globe." Again—still of geology—he says, "Yet it is in the midst of this mass of immaturity and ignorance that the pretended philosopher lifts up his pert physiognomy, and pronounces his impudent oracle."

As a farther illustration of the "erroneous principle" commented upon by the Bishop, we may add that we have now upon the table before us, in a literary periodical, an Essay or Tract, copied from "the New Monthly Magazine," "Upon the Scriptural Objections to the Polar Expedition"! from England. In this the writer carefully quotes his texts, and adds thereto his comments, to prove that such voyages of discovery as those that have been sent to the North, under Ross, Parry, &c., are plainly forbidden, in scripture; that they cannot, therefore, be successful, and that could they have been so, they would "have set at naught, and brought into strong controversy the most solemn and the soundest part of our ritual."

weapons which they had seen their trans-atlantick allics, both Catholick and Protestant, employ, and, as they believed, with satisfactory effect. The following which, says Prof. Caldwell, "is from the pen of a gentleman who occupied a pulpit," forms part of an article of some twenty pages, in the Boston Christian Examiner, for November, 1834.

"Our purpose in these remarks - the bearing of which on the subject before us may be somewhat remote - was to determine, as nearly as possible, the position which phrenology must occupy, in relation to previous systems of philosophy, if allowed to take its place among them. It is evidently a branch of the Sensual school, and must be eonsidered as belonging to the lowest form of that school. It is, in fact, a system of pure Materialism. We are fully aware that some of its professors have laboured to avoid this imputation, but, as it seems to us, unsuccessfully and unwisely. Unsuccessfully, because the fundamental principle, and indeed the whole structure of their doctrine is an everlasting contradiction to any disclaimer which they may see fit to make on this subject : - unwiscly, because the disavowal of Materialism gives an appearance of inconsistency to their system, and by this means deprives it of the small degree of consideration it might otherwise claim. If we are right in our suspicions, the motive of this disavowal proceeds partly from a natural, though very unphilosophical. dread of a consequence so startling, but chiefly from a fear of the discredit which it might bring upon their doctrine. This is mistaken policy. The worst feature which any philosophy can exhibit is inconsistency; and no system is entitled to respect, which does not eandidly admit, and resolutely meet the consequences which naturally flow from it. Not that phrenology would be any more true, if it assumed the form of avowed Materialism. God forbid! But it would certainly descrie in that form, a more patient hearing. The phrenologist may profess, if he pleases, that he is not a Materialist; such a profession is nothing to the purposc, except to prove that his instinctive good sense is truer than his philosophy; - but when he asserts that phrenology is not Materialism, he shows himself utterly deficient in logiek, and renders his whole system ridiculous."

After pointed condemnation of both Spurzheim and Mr. Combe, for what he deems their heresies, the Reverend author proceeds thus: "The pretensions of these men have been loudly echoed by their followers. Phrenology is proclaimed, with that boastfulness which always distinguishes sciolism, to be the ultimate and complete science of man—the last and highest attainment of human wisdom. The beautiful region of mental philosophy is to be converted into a barren

Golgotha, or place of sculls. Yes! this ignoble doctrine, born of the dissecting knife and a lump of medulla, betraying at every step its mean extraction, -this carnal philosophy, with its limited conceptions, its gray truisms, its purblind theories, its withering conclusions, and its weary dogmatism, is to supplant the lofty faith of antiquity, and the sublime philosophy of the bible, and to sit in judgement on the Infinite and Eternal! A great discovery has been made! It is ascertained that there is no in-dwelling spirit in man. Those god-like powers which raise us above time and sense, - those thoughts which compass heaven and earth, and commune with the All-wise and True, are not, as we once fondly deemed, the immaterial functions of an immaterial being. We have changed all. The anatomist has taken the subject into consideration. Those powers, those thoughts, arc the products of little lumps of flesh, measuring each an inch in diameter, weighing, altogether, about two pounds, avoirdupois. Behold here the true nature and the full dimensions of the human soul! " *

^{*}It has been well observed, by Mr. George Combe, that the phenomena produced by alcohol, opium, and nitrous oxide gas, upon the manifestations of mind, remain to be explained by those who assume, as some have, that mind has no distinct dependence upon matter.

The North American Review for July, 1833, in an article against phrenology, after several quotations from Spurzheim, holds the following language: "It seems to us sufficiently clear, from these extracts, that however the conclusion may be evaded by the convenient phrase, 'pure christianity.'— the doctrines of that work are entirely incompatible with any kind of christianity, that we have any notion of; and it is equally clear that these doctrines are legitimate deductions from the phrenological premises, as far as we understand them. Considering, therefore, that there is no evidence of the truth of phrenology, and a good deal in favour of christianity, we incline to prefer the latter."

The identity, in character, of these outgivings with those of an earlier date, in Europe, will not escape the attention of the reader. They are, indeed, substantially, repetitions of the early attacks made beyond sea; and which, for the most part, as we shall learn in the sequel, had been fully abandoned, in the lands of their invention, even before any use was made of them here, by those who now deem them suitable weapons wherewith to do battle against phrenology.

The Edinburgh Phrenological Journal, in 1831, observed; "It is instructive to trace the different views

in which the science has been regarded by religious persons, at different times, bearing in mind that the fundamental truths of the doctrine have never varied. A few years ago phrenology was favourably received, by a certain religious class, because it was believed to be the philosophy of their peculiar views. The corruption of human nature is a fundamental point of doctrine with them, and the large organs of Amativeness, Combativeness, Destructiveness, Acquisitiveness, Sccretiveness, &c., which the human head displayed, were hailed as so many philosophical evidences, coinciding with the testimony of scripture, in support of For a season, phrenology was patrontheir position. ised by this party, and recommended to the approbation of its adherents. But when plirenologists proceeded to show that the function of every organ is good in itself, and that evil arises only from abuses; that the tendency to commit abuses is, other things being equal, in proportion to the excess in size of the organs of the lower propensities over those of the moral and intellectual faculties; that the relative proportions of the organs are, to an important extent, influenced by the condition of the parents; in short, when the doctrine was stated that human dispositions are fundamentally influenced by physiological causes, phrenology began to be suspected and disliked by those who had, under the first view of it, regarded it with favour." *

We pass to other objections. It is not alone with such obstacles as we have hitherto cited, that phrenology has had to contend. Ridicule, in ever-varying form; with a species of ingenious misrepresentation, which its authors ever stoutly maintained could not be considered falsehood, have been liberally employed; while, for the more crude taste of the multitude, low scandal and wordy defamation, mingled with jests good or bad, as the case might be, have been poured out in rivers of profusion, from the publick press, and through the efforts of oral teachers. This was particularly the

^{*} The "erroneous principle of appealing to revelation, on questions of physical science" - to borrow, again, the language of Archbishop Whately, is here once more fully illustrated; as it has previously been, in the contentions it has caused against Astronomy, Geology, Political Economy - all the sciences, in short; and even voyages of polar discovery. In all these the truth of the science, or the propriety of the inquiry in question has been tested by what the sectarian objector supposed he had found, in the inspired volume, to sustain or condemn it: a theory being thus first formed, and facts subsequently made to conform thereto. Hence it was well said, by this prelate, that "the objections against astronomy have been abandoned rather, perhaps, from its having been made to appear that the scripture accounts of the phenomena of the heavens may be reconciled with the conclusions of science, than from its being understood that scripture is not the test by which the conclusions of science are to be tried."

case in England, for a long period; and the objections offered in this country, have generally been borrowed from the English press. In the round of these assaults it is but justice to the assailants to declare that they employed all the forces at their command; and that, too, with untiring zeal. They seemed resolved that if phrenology did finally triumph, the sin of its success should not be chargeable either upon their inactivity, or to conscientious scruples in regard to the means employed for its suppression. In both these particulars they have unquestionably secured themselves, forever, against the censures of posterity.

We select, promiscuously, a few examples of these pointed condemnations; confining ourselves mostly to the higher and exalted walks of periodical and other literature; as there can be little difficulty or uncertainty in determining, from these, what the more humble and usually less scrupulous followers, in the same path, would deem appropriately befitting for them, wherewith to instruct such as they find seeking edification, at their hands, in matters of this import.

"The writings of Drs. Gall and Spurzheim have not added one fact to the stock of our anatomical knowledge, respecting either the structure or functions of man; but consist of such a mixture of gross errours, extravagant absurdities, downright misstatements, and unmeaning quotations from scripture, as

can leave no doubt, we apprehend, in the minds of honest and intelligent men, as to the real ignorance, the real hypocrisy, or the real empiricism of the authors."

"To enter on a particular refutation of them, (the doctrines of Gall and Spurzheim,) would be to insult the understandings of our readers. Indeed we will flatter the authors so far as to say, that their observations are of a nature to set criticism at defiance. They are a collection of mere absurdities, without truth, connexion or consistency; an incoherent rhapsody, which nothing could have induced any man to have presented to the publick, under a pretence of instructing them, but absolute insanity, gross ignorance, or the most matchless arrogance."

"Such is the trash, the despicable trumpery, which two men, (Gall and Spurzheim,) calling themselves scientifick inquirers, have the impudence gravely to present to the physiologists of the nineteenth century, as specimens of reasoning and induction."

"We have two objects in view, in a formal exposé and exposure of the volume before us. The first is to contradict, directly, various statements in point of fact, made by Drs. Gall and Spurzheim, with unparalleled boldness and effrontery, which persons perfectly satisfied of the general absurdity of their opinions, may not have the same opportunities of refuting as ourselves; the second, and by far the most important, is to save the purses of our readers, if possible, before it be too late, by satisfying their curiosity, which might otherwise lead them to purchase the book themselves, or attend the lectures of these cunning craniologists."

- "We look on the whole doctrines taught by these two peripateticks, (Gall and Spurzheim,) anatomical, physiological, and physiognomical, as a piece of thorough quackery, from beginning to end."
- "There are a certain number of individuals, however, in every community, who are destined to be the dupes of empiricks. So it would be a matter of surprise, if these itinerant philosophers did not make some proselytes wherever they came."
- "Our readers will here recognise, without any difficulty, the same man of sculls whom we had occasion to take notice of more than twelve years ago. Long before this time we should have looked for his craniological death!"
- "Every one, of course, has heard of Dr. Gall's Craniology, and seen his plaster heads mapped out into the territories of some thirty or forty independent faculties. Long before this time, we confess, we expected to have seen them turned into toys for children, and this folly consigned to that great limbo of vanity to which the dreams of alchymy, sympathetick medicine, and animal magnetism had passed before it."

These several passages are all extracted from the Edinburgh Review, a work whose literary reputation ranked indisputedly high, and which, for a season, at least, arrogated to itself a commanding position among the opponents of phrenology. The reader will searcely fail to note, in the two elosing paragraphs, the editor's surprise that his own labours should have been of so little avail. The eomparison here made, of phrenology to alchymy, &c., has been deemed so extraordinary, for excellence, that scarcely a subsequent opponent of the seience, who has given the publick the benefit of his thoughts, upon the subject, has omitted to avail himself of its aid.

We proceed to Blackwood's Edinburgh Magazine: "Such patchwork systems of conjecture and speculation are fortunately destined, by the immutable and eternal laws of truth, to last but for a season. Craniology has almost lived its little hour. In this city, we are certain that, with the absence of Dr. Spurzheim, and the introduction of some other novelty, as a French dance, or a new beauty, it will be very soon forgotten."*

- "These infernal idiots, the phrenologists."
- "In the education of youth, the phenomenon is quite

[&]quot;This was uttered in 1817.

familiar, that both the intellectual and moral powers are stimulated and improved by scholastick eastigation.

Therefore those powers are not situated in the head!"

"Why is phrenology like a parrot? Ans. Because it is far-fetched and full of nonsense."

"We have already said, that, in our opinion, fool and phrenologist are terms as nearly synonymous as can be found in any language. One writer in this work demolished the Edinburgh Phrenological Society by one article equal to any thing in Arbuthnot or Swift. The phrenologists called out against wit and clamoured for pure argument. Here they have it with a vengeance!"

The London Literary Gazette furnishes the following:

Poor Dr. Stukely never dreamed that a future age would produce a tribe of crazy sciolists, denominating themselves craniologists; that these visionary abortions would establish, in modern Athens, formerly known by the name of Edinburgh, a Phrenological Society, and open a toyshop in the Strand, for the sale of casts from the heads of those worthies, who have been executed for murder, rape, and larceny; or, to employ the technical phraseology of this crew, who have been martyrs to excessive destructiveness, amativeness and secretiveness. How would the good sense of that philosopher have revolted on seeing M. De Ville point

out to his customers an *imperceptible* eminence or *insensible* depression, as the only reason for the fatal sentence of the law! And what would he have said on learning that it was the height of the fashion for every fool to have a cast of his own head!"

"A tribe of crazy sciolists, denominating themselves craniologists" — "these visionary abortions" — "this crew," &c.

The following are from the New Monthly Magazine:

- "Never was there a more humiliating conception of man than this; by which love, reason, wit, and all the nobler facultics of the human mind are framed of a number of masses of flesh conglomerated together, which enlarge and diminish while we live, and rot when we die."
- "The most celebrated of the ancient philosophers, in order to inspire virtuous deeds, were wont to extol the dignity of human nature; whereas some of the moderns strive to vilify it by assimilating men to the nature of beasts. But this plan of self degradation has been carried by Gall and Spurzheim, to the utmost extreme, as they have classed mankind among the carniverous animals, and given him an organ of destructiveness, which instils the propensity of killing animals, and of tormenting and murdering men."

"The difference between one man and another is prodigious, and the pretended cause is evanescent. For when the head of a humane man is compared with that of a murderer, and even when their brains are dissected, no distinction can be perceived, except by the adept! and he owns that the difference is hardly discernable."

The North American Review has spoken thus:

- "We have thus endeavoured to express our opinions on the merits, direct and incidental, of phrenology. It remains to offer some explanation of its rise and progress. This seems to us to be simple. The history of one physiological or medical delusion is mainly the history of all. Quackery, of any kind, needs but one requisite boldness. Of this, phrenological writers have shown no lack, and their temporary success, in most places, has been correspondent."
 - "Of the principal phrenological writers, including Gall and Spurzheim, and with one exception in favour of Mr. Combe, who appears to us to have allowed his natural acuteness and professional tendency to hair-splitting to bias his better judgement, we can say with sincerity, that to judge from their works, they are alike deficient in learning and accuracy. They appear to us to have picked up, by casual assiociation with well-informed persons, a mass of odds and ends

of information, which they have engrafted on their system, without much solicitude about their exact fitness. They have been at the feast of learning, and stolen the scraps."

"The convenient paganism of ancient Rome, in her march towards universal dominion, took care that the worshipper every where should find his own Deity among the Gods of the empire. And in like manner this doctrine is ready to adopt, without scruple, whatever any body happens to think wise and interesting, and call it phrenology, careless, so long as a multitude can be found to throw up their caps at the word of their leader, whether they know or believe the peculiar doctrines, whether they worship the hawk-billed divinities of Dendera, or the Jupiter of the Capitol."

The following we extract from the pages of the American Quarterly Review.

Referring to the proofs adduced by Dr. Gall, of separate organs in the brain, the Reviewer proceeds thus:

"To us they have always appeared very unsatisfactory. There is searcely one of them, indeed, which might not be applied, with equal force, to prove a complication of organs in the stomach. Let us try an example or two. 'In the same individual, all the faculties do not appear, nor are they all lost, at the same periods. Each age has its own psychology. How,

then, can we explain these intellectual and moral varieties, according to age, under the hypothesis that the brain is a single organ? Might we not also say: the likings and loathings of the stomach do not appear, and are not lost, at the same periods. Each age has its particular tastes. The child delights in molasses and gingerbread, the man in porter and beef. How can we explain these varieties on the supposition that the stomach is a single organ?

"Again: Dr. Gall says, 'It is a common observation, that when we are fatigued with one kind of mental occupation, we have recourse to another; yet it often happens that the new labour, instead of adding to the fatigue experienced from the former, is a relaxa-This would not be the case, if the brain were a tion. single organ, and acted as such, but is readily explicable under the doctrine of a plurality of organs. It is owing to a fresh cerebral organ having been put in action.' Does not the stomach present us with a perfectly parallel case? Does it not become fatigued with the long use of any particular kind of food, and, when thus cloyed, will it not receive another with perfect relish? How could this be the case, if it had not a pouch for the digestion of partridges, another for the digestion of mutton, &c. ?

"Let us take one more parallel. 'Insanity,' says Gall, 'is frequently confined to one single train of

ideas, as in the variety called monomania. Is it possible to comprehend this fact, under the hypothesis of the unity of the brain? In like manner the stomach, sound in all other respects, has sometimes a loathing for a particular article of food, a kind of monophobia. Some have an antipathy for cheese—some for honey. Does not this prove the existence of special honey and cheese compartments, in the organ of digestion?"

Once more from the Boston Christian Examiner:

"The prevalence and popularity of phrenological views may seem to require explanation. It is well known, to most of our readers, how suddenly the doctrine established itself, and how rapidly it gained ground in this region. No sooner had its late distinguished apostle appeared in our city, than a pentecost was witnessed, such as philosophy had not known before, since the days of the later Platonists.* All tongues were loosed, and a strange onamastick was in every man's mouth. Heads of chalk, inscribed with mystick numbers, disfigured every mantel-piece. Converts multiplied on all sides, some proselytes of the covenant, and some proselytes of the gate. A general inspection and registry of heads took place. In

^{*} This allusion is to Dr. Spurzheim, and has reference to his visit to Boston — the article from which we here quote bearing the date 1834.

defiance of the apostolick injunction, hands were laid suddenly on all men, and many, by such imposition, were ordained teachers. * * * * In short, this theory of man obtained a speedy and signal triumph, and all the higher principles of our nature were in danger of being entombed in the little tumuli of the brain."

Farther to multiply extracts of this kind, might justly be deemed superfluous; and therefore, with a profusion of material, still, upon every side, we desist. As proposed, we have confined ourselves, for examples, to the upper ranks of periodicals; however unworthy many of the extracts we have given, may be supposed to be of a place therein. We have done so, not because these were not sustained, in their course, by the subordinate press; but rather because much which emanated from that press will not bear repeating, except to those for whose peculiar taste and habits it was originally designed. The universality of the assault, particularly in England, is thus described by Professor Caldwell:

"There was scarcely a periodical of distinction, in Great Britain, whether daily, weekly, monthly, or quarterly; literary or political, scientifick or theological, that did not unite in it. To exterminate phrenology would seem to have become almost as much an affair of the empire, as it had recently been to triumph

over Napoleon. Even the pulpits joined the chorus of exceration, and issued their thunders in the terms 'infidel,' 'deist,' 'atheist,' 'abandoned of God,' 'candidate for hell,' and other like charitable appellations; all intended for the same purpose—to accumulate odium on the names of Gall and Spurzheim, and foreclose the publick ear against their doctrines."

While the publick press was employed, in the manner we have shown, the probable efficaey of seenick representations was suggested, and at once resorted to. In this field of adventure the celebrated Kotzchue made the first essay. At Berlin this author learned of Dr. Gall the teehnical terms of phrenology, and such other details pertaining to the seience as he deemed most susceptible of ridicule; and when he had done so, composed his play, namely, Craniomania, which was forthwith enacted at the Berlin Theatre; Dr. Gall, himself, constituting one of the audience. Early in the year 1830, a farec, namely, "The Phrenologists," was brought out and enacted, at Covent Garden Theatre, London. Ridiculc was the object of this piece; and the means resorted to for effecting the desired objeet were, mainly, such puns and plays upon the teehnieal terms of the seience as the ingenuity of the author suggested to him for the oceasion. An undertaking all similar to this was entered upon at Paris;

but when the piece was ready for enactment its exhibition was prohibited by the authorities.

These devices for exciting the ridicule of the populace were strongly seconded by the employment of the caricaturist, George Cruikshank. A publication of his, issued at London, had for its object the ridicule of the science, by grotesque and ludicrous personifications of the manifestations of the various phrenological organs. In some of these he was exceedingly happy; while, in others, by a total misconception of phrenological terms, his efforts were abortive, in the extreme.

It will not have escaped the attention of the reader that in the examples we have given, of this fierce contention against phrenology, little or no attempt is made to demonstrate its erroneous character, while great anxiety is constantly shown to defame it. The same is equally true of the greater part of the opposition that phrenology has ever encountered. A few attempts have been made, however, to exhibit its fallacy, and want of foundation in nature. But, to have quoted from these would have broken the chain of reasoning upon which their whole value and force must depend. All the more specifick forms of detailed objections to the science, that have been hitherto offered, have been treated and discussed in the pages of the different phrenological periodicals, already mentioned, and in

the various works of Drs. Gall and Spurzheim, Mr. Combe, Professor Caldwell, Mons. Broussais, and other phrenological authors.

To condemnations so general, or so vague, as those we have exhibited in the numerous extracts to which we have invited the reader's attention, detailed and systematick rejoinders were, of course, impossible; and this fact, it may be supposed, had originally no inconsiderable influence in dictating the peculiar species of offensive warfare in question. To the baleful influences of phrenology upon religion, so strenuously insisted upon, there was not, even at first, a general assent, either with the clergy or the laity. Among those who early gave their testimony, and the weight of their influence against this assumption, stands conspicuous the Rev. David Welch, one of the most gifted divines of Scotland. This gentleman was one of the original founders of the Phrenological Society of Edinburgh; and at the dinner subsequently given by that society to Dr. Spurzheim, namely, in 1828, he gave the following testimony in favour of the science. Having been referred to by name, by Dr. Spurzheim, at the table, upon that occasion, Dr. Welch, in reply said: "I feel as if I were discharging a part of the debt of gratitude under which he [Spurzheim] has placed me, when I bear publick testimony, in his presence, to the pleasure and benefit which phrenology has afforded me, in my own speculations, and still more to the unspeakable advantages I have derived from it, in my professional capacity.

"As reference has been made to this subject, I think it right to declare, that I have found the greatest benefit from the science, as a minister of the gospel. I have been led to study the evidences of christianity anew, in connexion with phrenology, and I feel my confidence in the truth of our holy religion increased by this new examination. I have examined the doctrines of our church, also, one by one, in connexion with the truths of our new science, and have found the most wonderful harmony subsisting between them. And, in dealing with my people, in the ordinary duties of my calling, the practical benefit I have derived from phrenology is inestimable." *

The presence of so distinguished and esteemed a divine, upon such an occasion; and still more, the employment of language like this, when addressing phrenologists, would be deemed inexplicable, did not these very facts disprove the charges of irreligion and

^{*} This clergyman has ever manifested the greatest zeal for the success of phrenology; and he has been repeatedly elected President of the Edinburgh Phrenological Society.

moral abandonment which, as we have seen, have been profusely heaped upon the votaries of this science.

To the extract from Dr. Ryan's Manual of Medical Jurisprudence which we have given, at page 152, "the Lancet," an English medical periodical, uttered the following reply:

"It is hard to treat of such consummate nonsense in a serious vein. How much longer will men, departing from the calm precepts of rationality, abandon their minds to childish prejudices, and their pens to the propagation of the most atrocious calumnies against those from whom they differ in opinion? When Harvey discovered the circulation of the blood, the cry of 'Atheist' was hounded after his footsteps; when Galileo deciphered the language of the stars - when Martin Luther opened the book of reformation - their fate was yet worse: there neither were tongues nor pens wanting to misconstrue the calculations of Newton into an overt denegation of the existence of a Supreme Being; and now, when Gall, and Spurzheim, and Combe, and Elliotson, - men whose lives were and are beyond reproach, as pure at least as those of the medical iconoclasts who hurl their declamatory missiles at their heads, - when these men come forward, and in the plenitude of learning, philanthropy and true religion, propound the firm data of a new, and, in its

broad facts, most useful science, up springs Dr. Ryan, and, despising arguments and facts beyond contradiction, utters the silly howl of Atheism against them. Dr. Ryan should know the vulgarity, to say the least of it, of this petty resort of all-confounding dogmatists. Whenever an ill-informed and shallow writer feels the ground of reason and truth sinking beneath his feet, he tries to avert his fall by catching hold of and dragging down the character of his opponent. Nor is the artifice without a transient triumph. The erafty disputant knows how readily mankind are prejudiced by a name, and in nearly the same spirit and expectation that induce a burglar to accuse the watch-dog of hydrophobia, he fixes the libel of 'Atheism' on the philosopher, whom the world, for a season, then cuts off. Truth, however, is certain, though tardy, in its proand the phrenologists have at least this consolation, that idle and noisy declamation never yet made a rational man the enemy of correct, or the proselyte of erroneous, opinions."

To the attacks, other than theological, there have not been wanting able and efficient refutations, from sources of the highest claims to talent, candour and respectability. In answer to the general, and oft-repeated charges that phrenology emanated from the ignorance of its promoters; that its anatomical discoveries are but pretensions; that it can be of no practical utility,

if true, &c., the Medico-Chirurgical Review, London, in 1826, held the following language:

"Phrenology is more intimately connected with the applications of medical knowledge than may at first sight be apparent. On this account, therefore, we recognise, in the science of its principles a legitimate and useful subject of professional inquiry. We must acknowledge, at the same time, that we feel impelled, by the pure force of multifarious and unquestionable evidence, to regard this as the most intelligible and self-consistent system of mental philosophy that has ever yet been presented to the contemplation of inquisi-We might have expatiated at great length on the utility of this science, in its applications to the purposes of education, legislation, political economy, criminal jurisprudence, history, legal and theological elocution, and, above all, to the true philosophy of medicine; but we have abstained from this indulgence, in the belief that the foretaste of an intellectual luxury we have provided for our readers, will stimulate them to desire the enjoyments of a full repast."

Much to the same end and purpose is the following, from Professor Uccelli's great work upon "the Organization of the Human Frame"—a book which the reader will recollect we have before had occasion to introduce to his notice:

"The physiology of the brain unfolds to us a philosophy of man, founded on his organization, and consequently in great and perfect harmony with nature. is founded on observation, on experience, and on researches a thousand times repeated, both in man and in other animals. Reasoning has done nothing more than seize the results, and fix the principles, which are derived from the facts; and, on this account, the numerous propositions which phrenology embraces, although often subversive of received opinions, are never at variance among themselves. Every thing is in harmony, every thing is connected, every point throws light upon the rest, and every fact corroborates the The explanation of the most abstruse general truth. phenomena of the moral and intellectual nature of man and of animals, is no longer a play of gratuitous suppositions; many of the most hidden causes of the differences of character of the species, of nations, of the sexes, from infancy even to decrepitude, are demonstrated and laid open, as are also the causes of the alienation of the mental functions.

"In short, man, that hitherto inextricable being, is made known. Phrenology composes and decomposes his thoughts, his talents, and his dispositions. It defines the object and the sphere of his activity. It becomes the fruitful source of most important applications to medicine, to philosophy, to jurisprudence, to morals,

to education, to history, which, on the other hand, become as many guarantees of the truth of the physiology of the brain.

"The anatomical and physiological doctrines of Gall, in regard to the brain and nerves, cost, to their indefatigable author, the labour of more than thirty years, spent in continual activity, and incessant observation; and, in our opinion, the truths announced by him deserve to be subjected to the most rigorous examination of the learned, who, without prejudice or partiality, and after the most rigid scrutiny and multiplied observation, may decide with confidence both on the doctrine in general, and also on the true nature and situation of the organs, and whether the number ought to be diminished or increased, the latter of which I consider by much the more probable.

"But all great truths, and especially those which are subversive of long established opinions, supported by venerated names, require Time, that impartial judge of every thing, to confirm their incontestibility, before they can become generally admitted."

Great inquietude seems to have pervaded the minds of those who wished ill to the success of phrenology, in relation to the strength and validity of the successive assaults that were, from time to time, made upon it; and for this reason it was that whenever a paper or pamphlet was uttered against the science, it was received and treated, by those who contemned the discoveries of Gall, as conclusively destructive of its every pretension; and yet, upon the appearance of a subsequent effort, of a like kind, the same honours were uniformly awarded to this last; and so on, continually. The succession of deaths, as it may not inaptly be termed, to which phrenology has in this way been subjected, is thus commented upon by Mr. George Combe, in his answer to Stone,* in 1829:

"Ever since Dr. Gordon's celebrated attack on phrenology, in the 49th number of the Edinburgh Review, fourteen years ago, the newspapers of this city, [Edinburgh,] with few exceptions, have announced with high encomiums, each successive attack on phrenology as utterly subversive of its pretensions. The very fact of their repeating this proclamation, year

^{*} This Mr. Stone had previously written and published one refutation of phrenology; but not satisfied with what he had done, he attempted its destruction a second time. His first effort, namely, "Evidences against Phrenology," had been reviewed, with most searching severity, in the "London Medical and Surgical Journal" — which work thus added its testimony to that of the "Medico-Chirurgical Review," in favour of phrenology. Few expositions of any author have been more disastrous in number, or more withering and disreputable to character, than those fixed upon Mr. Stone, by this review of his "maiden assault." Possibly it was the face thus put upon his first overthrow of phrenology, that induced his second effort, with the same end and aim.

after year, during so long a period scens never to have struck themselves as demonstrating its falsity and absurdity. If phrenology was refuted by Dr. Gordon, why did they laud Dr. Roget for demolishing it.* If Dr. Roget succeeded, why did they praise Dr.

As we have been thus reminded that Dr. Roget is the author of one of the Bridgewater Treatises, we shall be justified in introducing a passage or two from that work to the notice of our

^{*} This author produced his paper against phrenology in 1818; and it was published in the supplement to the Encyclopedia Brittanica. During the present year, (1839,) an edition of Dr. Roget's Physiology has been issued at Philadelphia, to which this article, from the Encyclopedia, is subjoined, as an appendix. The appearance of this book, from the American press, has been made an occasion, by some of our newspaper editors, to call the attention of phrenologists to the fact; to premise that the article in question will probably not be very acceptable to them; that they must buckle on their armour to meet the author, who is no common adversary; that he is author of one of the Bridgewater Treatises; that he is esteemed one of the first physiologists of Europe; and finally, that the phrenologists will not, with this warning fairly before them, be likely to dispute either his competency or his knowledge in the premises. From all this we must infer these editors did not know that Dr. Roget penned his attack twenty-one years since, and that, consequently, phrenologists were wholly familiar with all he had offered against them. Nor were they aware, it seems, that fifteen years since the Edinburgh Phrenological Journal contained a detailed review of Dr. Roget's objections - to which they are respectfully referred for some of the opinions which phrenologists entertain of the Doctor's attempt to overthrow their science.

Barclay so extravagantly, for subverting what was already overturned? — If Dr. Barclay was a fatal enemy, why did they extol Mr. Jeffrey to the skies, as the prince of all anti-phrenologists? — If Jeffrey left no shred of the science sticking to another, why did they sound a loud acclaim to Sir William Hamilton, for his reputed victories over its scattered members? — and if Sir William's brows were decorated with

readers. Firstly, however, we will go back the twenty-one years, to the Doctor's attack upon phrenology, for some passages there, with which we wish to contrast what we shall quote from his much later work, namely, the Bridgewater Treatise. In his attack upon phrenology Dr. Roget asserts: "The whole fabrick rests upon the validity of a single proposition, which, in itself is extremely questionable, namely, that the size of an organ is in general a criterion of the energy with which its function is performed." In his Bridgewater Treatise he says: "Confining our inquiries, then, to the more intelligible intellectual phenomena displayed by the higher animals, we readily trace a gradation which corresponds with the development of the central nervous organ, or brain. * * * * In proportion as the intellectual faculties of animals are multiplied, and embrace a wider sphere, additional magnitude and complication of structure are given to the nervous substance which is the organ of those faculties. The greater the power of combining ideas, and of retaining them in the memory, the greater do we find the development of the cerebral hemispheres. man, in whom all the faculties of sense and intellect are so harmoniously combined, the brain is not only the largest in size, but beyond all comparison the most complicated in its structure." Is size, then, no measure of power?

well-carned laurels, on account of his magnanimous achievements, why do they now cling to Mr. Stone, as if no other champion had tilted with success against phrenology? The only inference that can reasonably be drawn is, that those who uttered these eulogiums entertained a great yet childish prejudice against phrenology,—that they dreaded its ultimate triumph, as implying a censure on their own conduct towards

Again. In 1818, in his attack upon phrenology, Dr. Roget says: "The brain, that large mass of pulpy substance, which fills the eavity of the eranium, is, even at the present day, as incomprehensible in its functions as it is subtile and complex in its anatomy." Now, in his Bridgewater Treatise, the Doctor informs us that, "Experiments and pathological observations, however, seem to show that the hemispheres of the brain are the chief instruments by which the intellectual operations are earried on; that the central parts, such as the optick lobes, and the medulla oblongata, are those principally concerned in sensation; and that the eerebellum is the chief sensorial agent in voluntary motion." Here, then, is a division of the brain into separate organs! But again, in the same treatise, he says: " All the parts met with in the brain of animals exist also in the brain of man: while several of those found in man are either extremely small, or altogether absent in the brains of the lower animals." What is this last but phrenology? We quote it from the Bridgewater Treatise; yet the same passage occurs again in the author's "Outlines of Physiology" - so valuable does he deem it, and so important that it be known and remembered. The brain, here, is certainly a very different thing from that "pulpy substance," of the functions of which the Doctor knew nothing, in 1818; and whatever he would have

its founders, — but that, even while they condemned it, they were conscious of being ignorant both of its nature and its evidence, and were beset by that inward misgiving, that secret uneasiness, which ever haunts those who oppose truth on the strength of prejudice alone. It was this state of feeling which caused them to hail with deep interest every shadow of an argument, and every phantom of a fact by which they

us believe, concerning his not having changed his views, it is clear that these concessions have been forced from him by phrenological investigations, and the progress which phrenology has made since he first essayed its overthrow.

In 1823 the London Medico-Chirurgical Review, while remarking upon the claims of phrenology, spoke thus of our author and his attack: "Dr. Roget, indeed, is another author of consideration, who has delivered an adverse opinion on their merits; but he appears rather as a historian of the doctrines, who sums up his account by delivering an opinion against them, than as a regular enemy who comes into the field to oppose and destroy them. On this account we do not hold this gentleman as pledged even on the side which he has espoused, so as to stake his reputation on their futility, but view him as a critick open to conviction, if he has pronounced an erroneous judgement."

Whether the Doctor holds himself thus open to conviction we know not; but, that

"A change came o'er the spirit of his dream,"

between 1818, and the time of his penning his Bridgewater Treatise. we have clearly shown -- be the cause what it may.

might justify, to their own minds, the doubtful conduct which they had pursued."

In concluding the same article, Mr. Combe observes:

"It is now thirty-three years since Dr. Gall first announced his discovery of the functions of the brain, and it is just so many years since an emperour and his nobles, and the press of Europe, set themselves to subvert his conclusions, subdue his spirit, and laugh his doctrines to scorn; but the doctrines have spread over Europe, and taken root in Asia and America. It is an incredible assertion, then, to say that Dr. Gall, Dr. Spurzheim, or any other individuals, have set kingly power, priestly bigotry, and philosophick pride, at naught by the mere force of their talents, without a basis for their tenets in reason or in fact. The compliment to their genius, implied in such a statement, is too extravagant to be admitted, even by their most enthusiastick admirers. Nothing but the force of truth could have carried them victorious through such hosts arrayed against them; and the same quiet but resistless power will ensure their final triumph over every obstacle that may be presented to their progress."

The position, namely, that phrenology is a delusion, because very few scientifick men, distinguished for their attainments either in mental or physical philosophy had given their assent to its doctrines, was

early and often assumed. In the Royal Academy of Paris, in 1836, Professor Broussais, in a discussion involving phrenology, thus replied to this argument: "This, indeed, is a most feeble objection. In all ages, the savans have been the most opposed to the diffusion of new discoveries. The dread of ridicule, envy, the reluctance to be taught any subject by younger and less lettered men, and a host of other feelings - these often constitute the motives of this opposition." Motives like these have, indeed, but too often blighted the fairest hopes of the benefactors of mankind; and they have, in every age, constituted stumbling blocks, which those engaged in creating, as it were, or in advancing any one of the sciences, have ever been fated to encounter. In the earlier days of phrenological research, this evil weighed heavily upon its advancement: so much so, that great moral courage was indispensable to those who engaged in its promulgation. And even at a much later period, this evil continued a blighting one, in its consequences. The refusal of the "Royal Society," of London, to allow a phrenological paper, which had been read before them, to appear, in their printed Transactions, upon the evasive - because untrue - assumption that it contained nothing new, and therefore came not within their rules: the refusal of the "Society for the Diffusion of Useful Knowledge," London, to insert, in the pages of the "Penny Cyclopedia," a treatise upon phrenology, when offered them free of cost, upon the plea that, in the opinion of the Society's editors, "phrenology, and its connexion with the moral and intellectual sciences is not such as would justify them in adopting the offer": and the boorish personal rudeness of the philosopher, Dugald Stewart who, when Dr. Spurzheim called at his own house, to deliver a letter of introduction, refused to receive the disciple of Gall, or even to tender him the use of a chair — all these are manifestations of that opposition to the diffusion of new discoveries, of which Mons. Broussais has so well explained the causes.

But conversions to the truth of phrenology, among the learned, seem recently, in despite of all this, to have been not uncommon, as many illustrious names, in the ranks of these, are now found enrolled upon its side, and bearing testimony to its value. Particularly is this true of medical men, the most prominent of whom, in various countries, have generally embraced the science with ardour, and defended it with success. It is the medical profession, indeed, rather than any other, which directly leads to an investigation of the nature and functions of the brain; and this may explain why it is that, among the best informed, in different communities, the prominent medical gentlemen are more frequently phrenologists. To this is owing, also, the fact that the leading medical periodicals are

generally the staunch and standing defenders of the science: and the same is true of authors upon physiology. That a correct estimate may be formed, by the reader, of the value of this remark, the names of some of these are subjoined: beginning, then, with France, we have, among others, Andral, Professor in the Faculty of Medicine, of Paris; F. J. V. Broussais, M. D., Professor of the Faculty of Medicine, and Chief Physician of the Val-de-Grâce; Cloquet (Jules,) Professor of the Faculty of Medicine, of Paris, and Surgeon to the Hospital of St. Louis; Falret, Physician to the Salpetrière; Ferrus, Physician to the Bicêtre; Focillon, Assistant Physician to the Invalids; Pinel, Physician; Rostan, Physician to the Salpetrière; Sanson, Surgeon to the Hôtel Dieu; Voisin, Treille, Thiery, Teissier, Tanchou, Sorlin, Sarlandicre, Pressat, Ribes, Richy, Roberton, Robouan, Pilliot, Pichard, Pariset, Moynier, Monnoye, Mondierc, Mege, Maurin, Lombard, Londes, Lelut, Legallois, Leblond, Laroche, Lanyer, Lamouroux, Jaquemin, Jolly, Koref, Lacorbiere, Frapart, Foville, Fossati, Forget, Fontaneilles, Foissac, Dupuis, Abraham, Amussat, Bouillaud, Canuet, Chapclain, Corby, Dannecy, Dauvernc, Devilliers, Doin, Dubuisson, and Vimont, Physicians. Most of these arc found in the list of members of the Paris Phrenological Society, as carly as 1831. Of the physicians who have since added their names thereto, and of those, not members, who have embraced and sustain the science, in France, since that period, we have no means of furnishing the names even of the most prominent.

In the British Islands the members of Phrenological Societies are stated at upwards of one thousand; and of these one third are avowed to be medical men. Among the most prominent medical phrenologists in these Islands, stand the names of the late Dr. John Abernethy, F. R. S.; James Johnson, M. D., Member of the Royal College of Physicians, London, Editor of the Medico-Chirurgical Review, and late Physician to the King; Dr. Andrew Combe; Dr. Gregory; Dr. Elliotson, Medical Professor in the University of London; Adam Hunter, M. D., Member of the Royal Medical Society, Edinburgh, and Physician to the House of Recovery, Leeds; Thomas Buchanan, Licentiate of the University of Glasgow; Alex. Chalmers, M. D.; Robert Hamilton, M. D; Benjamin Bell, Fellow of the Royal College of Surgeons, London and Edinburgh, &c.

In the United States, Professor Charles Caldwell. M. D., Drs. John Bell, and Benjamin R. Coates, the late Dr. Physick, Professor W. Byrd Powell, M. D., William Gibson, M. D., Thomas Harris, M. D., John W. Francis, M. D., J. C. Beals, M. D., A. Sidney Doane, M. D., S. G. Howe, M. D., M. S. Perry, M. D.,

J. F. Flagg, M. D., John Flint, M. D., N. B. Shurtliff, M. D., Benjamin C. Joslyn, M. D., Caleb Ticknor, M. D., Ch. A. Lee, M. D., P. H. Wildman, M. D., Benjamin Drake, M. D., &c. Scattered over various other parts of the world there are, also, many distinguished medical phrenologists, among whom we may name Professor Hoppe, M. D., Copenhagen; William Wagner, M. D., Berlin; Professor C. Otto, Copenhagen; Frederick Leighton, M. D., St. Petersburgh; Professor Uccelli, Florence; and George M. Paterson, M. D., Dr. Abel, Physician to the Governour-General, J. Grant, Surgeon-General, &c., Calcutta.

Let not these be thought catalogues of the medical names connected with phrenology: they are far from it, and are only meant as very limited references; while numbers that have been omitted are equally prominent with many here enumerated. From several of these, being more particularly phrenological writers, we have already quoted, more or less fully. We have placed the name of the celebrated Dr. John Abernethy, of London, in the above list; and as we have often heard, and lastly, within a few months, this individual cited as an opponent of phrenology, we quote his own words upon the subject. In 1821, Dr. Abernethy published "Reflections on Gall and Spurzheim's System of Physiognomy and Phrenology," addressed to the Court of Assistants of the College of Surgeons, London,

in which he treated it as the true system of the philosophy of mind. The following is his language:

"The foregoing representation of human nature, when viewed in its proper light, and with due attention, must, I think, please every one; for it is not like others heretofore presented to us, which appear in comparison but as mere diagrams, the result of study and imagination; whilst this seems like a portrait from life, by masterly hands. It is not, indeed, exactly like any individual, but capable, by alterations, of being made to resemble every one; so that by the help of a few touches we are able readily to show 'Virtue her own image, Vice her own deformity,' in all their diversities.

"I had great gratification in being intimate with Dr. Spurzheim whilst he remained in London, and in a kind of badinage I proposed to him questions which he answered with facility, and in a manner that shewed a very perfect knowledge of human nature. For instance, I inquired whether he had discovered any organ of common sense? and he replied in the negative. I then demanded in what that quality consisted? and he answered, in the balance of power between other organs. This answer shews why a quality so peculiarly useful is common to all and rare in any: for there are but few who have not prejudices or partialities, hopes or fears, or predominant feelings, which

prevent them from pursuing that middle and equal course of thought and conduct, which unbiassed consideration, or common sense, indicates and directs. I inquired of Dr. Spurzheim if there was any organ of self-control, or if not, whence that power originated? He said, 'it is the result of a predominating motive: thus, justice may control avarice, and avarice, sensuality.' In short, I readily acknowledge my inability to offer any rational objection to Gall's and Spurzheim's System of Phrenology, as affording a satisfactory explanation of the motives of human actions.

"Their representation simplifies our notions of such motives, by lessening the number of reputed agents; thus, the want of benevolence and virtuous dispositions, with excitement to anger, produces malevolence, and this conjoined with concealment, malice. I need not recite a variety of instances, since they are sufficiently apparent. We perceive that mankind may be naturally benevolent, conscientious, and humble-minded, or the reverse; just as they are naturally timid or fearless, resolute or fickle, candid or reserved; we perceive that they may have natural talents, qualifying them to excel as mathematicians, calculators, linguists, draughtsmen or musicians; and also that they may possess various degrees and kinds of intellectual power. Yet, whatever may be the natural character or abilities of the man, he neither deserves praise nor censure,

for he is but what nature made him. We farther perceive that real virtue consists in the efforts which we make to cultivate our talents, rational powers, and moral sentiments, and to educate and control the inferiour propensities of our nature, so as to allow to each only its proper sphere and mode of action, thereby rendering our conduct conformable to the acknowledged laws of moral rectitude, and religious obliga-And, if we were to examine our own conduct and that of others by this test, we shall probably discover but little in the former, which we are warranted warmly to approve, or in the latter strongly to con-Nature has not only given to man good and honourable sentiments, but also made it his highest gratification to employ and indulge them; so that we rarely deny ourselves this supreme pleasure, except when prevented by selfish considerations.

"Now Gall and Spurzheim have represented the office of the superiour intellectual faculties and sentiments as affording motives and possessing powers that can, and ought, to control and educate the inferiour propensities. But there have been, and are some who seem to wish it believed that human actions are under the control of these inferiour propensities; allowing, indeed, that the fear of great personal evil may deter us from compliance with their urgent solicitations. They also represent the absence of guilt but as the

result of the want of temptation. Yet if we inquire why such degrading and disgusting views of human nature are presented to us? Why opinions are inculcated which tend to weaken virtuous efforts, by declaring their inefficacy? We find that the authors of them, from a view of their own conduct, and that of the baser part of mankind, are convinced that there is no virtue in them, and therefore infer that others must equally want it. Thus do they presumptuously 'call virtue, hypocrite,' and 'malevolently pluck away the rose from the fair besom of innocence to place a blister there.'"

Probably no man paid more close attention to phrenology, and all that was offered, both for and against it, during the early war respecting it, in Europe, than Dr. James Johnson; while all concede his full ability to form a clear and rational opinion upon the merits of the respective arguments. In 1823, while speaking of the doctrines of phrenology, in the Medico-Chirurgical Review, of which he was editor, Dr. Johnson employed the following language:

"No person is to be met with, who is able to show a clear and philosophical reason, why these [the doctrines of phrenology,] ought to be disregarded; and it is a curious fact, well worthy of observation, that, except the late Dr. Gordon, of Edinburgh, who fell, as it were, into a serious discussion inadvertently, and un-

intentionally, by his intemperate article in the Edinburgh Review, no author of note, either medical or metaphysical, has chosen fairly to grapple with the subject, and expose its errours; and of those who have written, we do not know one, who has made good his objections, in the judgement of impartial men, and replied satisfactorily to the answers given by the disciples of the new school."

Upon the occasion of the death of Dr. Spurzheim, in 1832, the Boston Medical Association, directed the proceedings of a special meeting published, in which they unanimously thus express their views of Spurzheim's doctrines and labours:

"The Boston Medical Association having received with great satisfaction the visit of the late Dr. Spurzheim; and their acquaintance with him having inspired them with high respect for his researches in anatomy and physiology, and a deep interest in his opinions on the moral and physical improvement of man; therefore,

"Resolved, That we recommend to our fellow citizens the opinions of the deceased, on the improvement of our systems of education; and especially what relates to the development of the physical powers and moral dispositions; and as they can no more expect to hear them from the lips of our lamented friend, that they

lose no time in making a practical application of them to the existing state of our institutions, for the culture of the human mind."

We have stated that the leading medical periodicals have very generally adopted or defended phrenology. We may mention, of this number, the "Medico-Chirurgical Review," the "Medical and Surgical Journal," and the "Lancet," all of London; and the "Transylvania Medical Journal," the "North American Medical and Surgical Journal," the American Journal of the Medical Sciences," &c., in the United States.

Physiological authors, also, we have remarked, are no less phrenologists. Professor Caldwell, whose official and professional duties have long and constantly urged him to an intimate acquaintance with all these, made, in 1833, the following statement:

"Every system of physiology, with one or two exceptions, written within the last twelve years, into which we have looked, admits the general soundness of phrenology, and adopts both its tenets and its terms. Of almost every work of merit, treating of the diseased functions of the brain and nerves, that has appeared since 1820, the same is true. Even the authors of such books who do not openly profess themselves phrenologists, adopt the principles and language of the

science, and apply them to their purposes, with decided benefit, as well to their own reputation, as to their readers."

The proportion of exceptions, since the time in question, according to the best data at our command, is still less than is here allowed by Professor Caldwell, up to that period.

We have said that medical men, from the nature of their professional inquiries, had been particularly led to a knowledge of phrenology, and that they had very extensively embraced its doctrines; and we have adduced the proofs of that position. But, while men of this class have decided for the truth and value of phrenology, they have not done so alone: distinguished men, of every class, have accompanied them. In 1824 the Phrenological Society of Edinburgh consisted of eighty-six members, of whom ninetecn were private gentlemen, with Sir George M'Kenzie, Bart., at their head. Of the remainder, nineteen were in the law; four were ministers of the Scotch kirk; two colonels; three captains; five artists; with civil engineers, bankers, merchants, school teachers, &c. were members," says the Medico-Chirurgical Review, "of both Oxford and Cambridge, Fellows of the Royal Society of both London and Edinburgh, physicians and surgeons of great medical establishments, a professor of the University of Transylvania, and another of Berlin." In like manner the Phrenological Society of Paris, even at its first creation, embraced men of high distinction in the state, in literature, the sciences, &c. Among these were the king's counsel; the head of the department of publick instruction; the Inspector-General of the Houses of Detention, in France; the editor of the Revue Encyclopedique; a civil engineer, a professor in the Faculty of Law, at Paris; naturalists, advocates, &c. &c. In both these countries the number of prominent and distinguished men that have embraced the doctrines of phrenology, has greatly increased since the dates exhibited above; including those of every prominent walk and profession.

In the United States many of the illustrious names belonging to Science, Literature, the Arts, and the more exalted walks of private life, are found either directly connected with phrenology, or yielding to its value their approving testimony, by the bestowment of honourable distinction upon the living, and by expressions of regret for the dead, whose only claims to these manifestations of their reverence are based upon phrenological services rendered to the human family. Upon the occasion of the death of Dr. Spurzheim, already detailed, a meeting was convened at Boston, to adopt those "measures which should express a sense of the publick loss sustained by the death of this distinguished man, and of the impression made

by his talents and virtues," when the subject was committed to the following committee, namely: Josiah Quincy, LL. D., President of Harvard University; Nathaniel Bowditch, LL. D.; Joseph Story, LL. D.; Joseph Tuckerman, D. D.; Charles Follen, J. U. D.; Jonathan Barber, M. D.; Charles Beck, P. D.; William Grigg, M. D.; George Bond, and Charles P. Curtis, Esquires.

At New-York, upon the close of one of Mr. Combe's courses of lectures, in December, 1838, a meeting of the class was held, at which the following, among other resolutions, was passed:

"Resolved, That in the application of phrenology to the investigation of human character, and the practical purposes of life, we perceive a new era in mental and physiological science, in which we believe human inquiry will be greatly facilitated, and the amount of human happiness essentially increased."

To tender this sentiment, with others, to Mr. Combe, the following committee was raised: Silas Jones, Esq. Counsellor at Law, and Superintendent of the New-York Institution for the Blind; Judah Hammond, Esq., Judge of the Marine Court; John B. Scott, Esq., Judge of the Marine Court; Loring D. Chapin, Esq., Member of the Legislature, &c.; Robert Sedgwick, Esq., Counsellor at Law, &c.; A. Lee, M. D., Professor of Materia Medica in the New-York University;

B. F. Joslin, M. D., Professor of Mathematicks and Natural Philosophy, in the New-York University; E. Parmley, M. D.; J. Neilson, M. D.; J. W. Francis, M. D.; A. S. Doane, M. D., Professor of Physiology in the New-York University; Caleb Ticknor, Professor of Hygiene in the New-York University; and Joel Foster, M. D.

At a like meeting, for a similar purpose, held at Philadelphia, in the early part of the year 1839, it was, by members of the class,

"Resolved, That they have listened with great pleasure and mental profit to the comprehensive views of human nature, and to the elucidations of individual character, set forth by Mr. Combe, in his lectures, just completed: and that in these they recognise many important suggestions for the improvement of education and jurisprudence, and the consequent increase of the happiness of mankind."

To present this resolution to Mr. Combe, and to request him to repeat his course of lectures, the following committee was appointed: Nicholas Biddle, LL. D., President of the Board of Trustees of the Girard College, and Member of the American Philosophical Society; Joseph Hartshorne, M. D., Member of the American Philosophical Society; Benjamin W. Richards, former Mayor of the city; William Gibson, M. D., Member of the Philosophical Society; Thomas Harris,

M. D., Member of the Philosophical Society; Alexander D. Bache, President of the Girard College; Rembrandt Peale, a painter of celebrity; Charles Picot, Teacher; and John Bell, M. D., Member of the American Philosophical Society.

To the foregoing names many additions might, indeed, be made, for each country; yet they could, at best, be expected to add weight to such a catalogue, only in their numerical proportion.

Phrenology has been some years recognised as a science at the London Hospital, the London Institution, and Granger's Theatre of Anatomy and Medicine; and the Professor of the Principles and Practice of Physick, at the London University has, for about the same period, taught the treatment of Insanity upon phrenological principles. Several private schools, also, in England, have been conducted upon the principles of this science, and with marked success. What has been done, if any thing, in this way, upon the European continent, we have not the means of determining. The London Lancet stated, indeed, a few years since, that the government of France had sent to England for information, in detail, of the condition of phrenology there, with the view, as was supposed, of collecting materials for a practical application of the principles of phrenology to the education of youth, and the reformation of criminals. Many of the Medical Professors, of France, and some, certainly, of those of various other nations of the old world, both teach the science, and apply it in practice; but whether other publick application of it, in these countries, prevails, we have no means, at this time, of determining. In the United States, we have seen that phrenology has long constituted a part of the regular medical instruction imparted by Professor Caldwell, though it has not been generally, and is not now, so taught, in the medical schools; nor are we aware that it has at any time constituted a part of the regular courses of publick instruction, other than medical, of this country. Individuals, both in the United States and in Europe, who have acquired a competent knowledge of phrenology, practically to apply it, constantly, though unostentatiously, regulate their intercourse, with the members of society, by its lights and principles.

During the gradual and unremitted progress of phrenology, as disclosed in the preceding pages, voluntary associations, under the denomination of Phrenological Societies, were formed, in great numbers; having for their object its farther advancement and cultivation. Several of these have been already more than once adverted to. They are scattered over the British Islands in numbers too great for enumeration here; while in France, Denmark, and, we believe Germany, they are also found. Even in Calcutta one of these was established as early as the year 1825. In the United States, perhaps the greater part of the principal cities and towns have each a similar organization. Some of these are incorporated, while others are not; and they have usually connected with them libraries, and cabinets of sculls, casts, &c., for the use of the members.

The general connexion of prominent men with phrenology which the preceding pages exhibit, is sufficiently detailed for our purpose, and as much so as is compatible with our plan. The individual opinions and reasonings of many of these, upon the science, the reader has already encountered, in the preceding portion of this history; and farther illustration will be given, to this branch of our subject, by the additions which follow.

Mr. George Combc was recently a candidate for the chair of Logick in the University of Edinburgh; and as is there customary, upon such occasions, testimonials were collected for the purpose of sustaining the candidate's claims to the station he sought. Very many of these, in the case of Mr. Combe, were almost wholly of a phrenological character. The testimonials thus collected were all subsequently published in a volume, at Edinburgh: and from the collection thus formed we extract the following. Professor C. Otto, of the University of Copenhagen, says:

"I feel it a duty incumbent upon me to state, that, as far as twelve year's observation and study entitle me to form any judgement, I not only consider phrenology as a true science of the mind, but also as the only one that, with a sure success, may be applied to the education of children, and to the treatment of the insane, and criminals. I have found it of the highest importance, as physician to the civil prisons, in acquainting myself with the character of the prisoners, and adapting my moral treatment of them to this knowledge; and as a member of the Royal Board of Health, my votes on the motives and the misdeeds of criminals, of whose responsibility the board is questioned, are always according to phrenological principles; and hitherto the court of justice has in all instances acted upon my judgement. In my lectures on Forensick Medicine, I treat the chapter on insanity and responsibility, phrenologically; and am, by the science of phrenology, more able to explain the subject than I would be by metaphysicks, the doctrines of which badly accord with the precepts of common sense, and daily experience. Upon the whole, I consider phrenology as one of the greatest benefits that of late has been bestowed upon mankind."

Professor Hoppe, also of Copenhagen, writes thus: "I state it as my most sincere conviction, that phrenology is the only true philosophy of mind, and, of

course, the most important of all human sciences; the influence of which, in a great many practical points of view, already has been, and still will be more striking."

From G. M. Schwartz, Professor of Natural Philosophy, Stockholm, Sweden:

"I consider the important discovery of Messrs. Gall, Spurzheim, and others, on which phrenology is based, to be founded on the most scrupulous and conscientious observations and inductions, and as having perfectly achieved their object — that of giving to the science of the mental faculties, called psychology — till now purely speculative — the same degree of evidence possessed by the other natural sciences; on which points controversy seems, in all countries, to have ceased among those learned men who have made themselves sufficiently acquainted with the doctrines, and who, by the nature of their studies, are competent to judge of them."

From Robert Hunter, M. D., Professor of Anatomy and Physiology, Glasgow:

"For more than thirteen years I have paid some attention to the subject, [phrenology,] and I beg to state that, the more deeply I investige it, the more I am convinced of the truth of the science. I have examined it in connexion with the anatomy of the brain, and I find it beautifully to harmonize. I have

tested the truth of it on numerous individuals, whose character it unfolded with accuracy and precision. For the last ten years I have taught phrenology publicly, in connexion with anatomy and physiology, and have no hesitation in saying that, in my opinion, it is a science founded on truth, and capable of being applied to many practical and useful purposes."

From Dr. John Mackintosh, Fellow of the Royal College of Surgeons, Edinburgh:

"I was formerly not only an unbeliever in phrenology, but a determined scoffer, and my conversion was slowly produced by the occurrence of individual cases that were accidentally brought before me. I regard phrenology as the only true basis of the science of mind. * I know no one who has devoted the energies of his mind to the careful study of phrenology, who has not become a convert; and I anticipate, at no very distant date, the triumph of truth over the prejudices which have been so assiduously heaped upon the science by crafty men, or those quite ignorant of the subject. add, that a great revolution has taken place within these few years, not only in this country, but also on the continent, in favour of phrenological doctrines; the number of opponents has diminished, and the disciples have increased in a remarkable manner: so much so, that in Paris there is scarcely an illustrious name connected with medicine, or any of the sciences, that is not found enrolled in the list of members of the phrenological society."

From SIR G. S. MACKENZIE, Bart. of Edinburgh:

"While I was unacquainted with the facts on which it is founded, I scoffed, with many others, at the pretensions of the new philosophy of mind, as promulgated by Dr. Gall, and now known by the term of phrenology. On hearing and conversing with his most eminent disciple, the lamented Spurzheim, the light broke in upon my mind; and many years after I had neglected the study of mind, in consequence of having been disgusted with the utter uselessness and emptiness of what I had listened to in the University of Edinburgh, I became a zealous student of what I now perceive to be the truth. During the last twenty years, I have lent my humble aid in resisting a torrent of ridicule and abuse, and have lived to see the true philosophy of mind establishing itself wherever talent is found capable of estimating its immense value."

From Dr. R. Macnish, LL. D., of Glasgow; author of the "Philosophy of Sleep":

"For many years the philosophy of mind has occupied much of my attention; but till I became acquainted with the new method of mental investigation discovered by the late Dr. Gall, I found it utterly impossible

to arrive at any rational conclusion upon the subject. The old system of metaphysicks explained nothing satisfactorily, and like all other persons who attempted to arrive at definite results, by its assistance, I only experienced mortification and disappointment. Since commencing the study of phrenology, a new light has dawned upon me, and various phenomena which were before perfectly inexplicable, upon any known theory, are now of easy solution. Nor is the influence of this light confined to a state of healthy mental manifestation; it extends equally to the functions of mind in a state of disease, giving a new insight into the hitherto dark and unaccountable mysteries of insanity, and clearing up what was formerly hid in impenetrable darkness. As a medical man, I have derived the greatest benefit from the forcible manner in which the study of phrenology has directed my attention to the functions of the brain, in health and disease. The relations subsisting between the brain and other organs have been unfolded by this science with uncommon clearness, and with a precision and accuracy hitherto undreamt of by physiologists. I have no hesitation in saying that my notions on every subject, whether of moral or physical science, have become more just, more systematick, and more in harmony with each other, since I studied phrenology; and I

firmly believe, that the same fortunate result may be calculated upon by all who pay any attention to the subject."

From WILLIAM HUNTER, A. M., Professor of Logick, Glasgow:

"I am convinced that phrenology is the true science of the mind. Every other system is defective in enumerating, classifying, and tracing the relation of the faculties. I consider this science indispensably necessary in teaching any branch of education properly. I find it eminently useful in giving instructions in ancient and modern history; in Greek and Latin, in connexion with our vernacular tongue; in Logick and Rhetorick, with the analysis of argumentative works on the most dissimilar subjects; and it is signally effective in exciting and directing the faculties of the mind, without having recourse to corporeal punishment, or even a peevish or resentful expression."

Farther to augment this mass of evidence, full and conclusive as in all respects it is, would seem superfluous, indeed; since probably no names could readily be selected in which those who, by education and pursuit, have become qualified to offer an opinion upon the subject, would feel more unreserved confidence than in those already cited.

While the names we have recounted, and others

equally illustrious - names that virtuous intelligence everywhere delights to honour - have become identified with phrenological research, both the number and activity of the opponents of the science have, within a few years, materially declined. The course adopted by the members of the medical profession, and through them, in the pages of the periodicals under their control and direction, has evidently had much agency in this; while the more multitudinous miscellaneous press, which, upon all questions of science, very naturally derives its tone and manner from periodicals of more exalted pretensions, is appreciably less censorious and more just. It is asserted by Professor Caldwell, in his letter to the editor of the American Phrenological Journal, that a writer of standing, or a periodical of influence and authority, which contests the principles of phrenology, is no where to be found. Indeed, the champions in this war for old opinion's sake have fled the contest: and, in the language of the author just quoted, the Gordons, Giffords, Jeffries and Hamiltons of past days are no longer in the field.

We have now traced phrenology, in its progress, from the moment when, commencing with the unaided efforts of a single individual, it has gradually spread itself over the civilized world, until all the great subdivisions of the earth have been penetrated by it; and until, in all these, it has secured a settled

permanence in the minds of the great body of the intelligent and inquiring philosophers. During this progress, and the successive changes incident thereto, we have seen it subjected to all the violence of opposition of which its foes were capable, and forced to combat every real or imaginary objection which they saw fit to offer to its advancement. These, of course, have varied with the time and the local occasion that have called them forth; but they have ever been urged with the full measure of ability and zeal that their authors could command. We have seen, too, that a favourite though singular presumption, adverse to the truth of phrenology, in the carlier stages of its history, rested upon the fact that philosophers had not then extensively adopted its tenets. That position being now no longer tenable, one widely different, and far more recent, in point of time, has been substituted. It is, that comparatively few in number embrace phrenology, any where, while the great body of every nation and people does not admit, or even countenance its claims. To a position so faulty, and a test so fallacious, phrenologists have replied that the same is true of all the other sciences: that the great body of the people of every land, neglects all these; and this no less from habitual callings than from established inclination; and that, consequently, these detailed truths arc nowhere admitted, by the general population. None

such, for instance, admits, by majority, that a geological and chymical examination of a given soil can determine what that soil will, or will not produce; or that many of the fixed stars revolve around each other, in regular orbits, and at stated periods of time; or that a strong fire, with smoke and flame, may be kindled and kept burning, with only a mass of snow for fuel, &c.; and yet these facts are all very well known to those whose inquiries have rendered them conversant with the several sciences to which they respectively belong. It is not, then, to the multitude that we are to look for the verification of scientifick truths. We do not even seek such verification in the miscellaneous periodicals of the day; and for the reason that the editors, and others, who fill the pages of these works, have rarely given science any attention, and therefore are not competent to impart scientifick instruction - however capable they may be in their more immediate and proper sphere of action. "Wc judge of chymistry as it exists in the works and minds of its most eminent cultivators, and not as it comes forth from those of half-initiated disciples; and, in like manner, we form our opinions in regard to Natural Philosophy, and the applications of its principles, not as unfolded to us in the pages of a newspaper, or in the hastily got up articles of a review, but as they come from the minds of a LAPLACE, a PLAYFAIR,

a Leslie, or a Guy-Lussac. No good reason can be given why a different, and less equitable rule should be applied to phrenology; on the contrary, from its being a new science, candour and justice would rather require that a more liberal allowance should be made for its real and supposed deficiencies." *

In defence of the daily assumption, namely, that the interest felt in phrenological inquiries is less, now, than formerly, is offered the fact that less is said of the science, in general society, than at a former period. The author just quoted has, to this position, thus replied: "From now hearing much less of phrenology, in ordinary conversation, than formerly, some intelligent persons have hastily supposed that the new doctrines were fast hastening into the vale of oblivion which had been assigned them by more than one eminent critick, and have therefore concluded that it was necdless for those who had anything else to do, to occupy their time in verifying or confuting their truth. This inference, however, is entirely erroneous, and proceeds on a false view of the facts from which it is deduced. A few years ago we heard a great deal concerning phrenology, because it was then a constant theme of discussion in medical and literary societies

^{*} Dr. Andrew Combe, on Mental Derangement.

and journals, and at every convivial board; and its merits and demerits were canvassed with a warnith and acrimony which, on both sides, arose, too often, from imperfect information and exasperated personal feeling, rather than from a philosophick search after truth. Now we hear less, not because it is forgotten, but because the feeling is becoming general among candid and enlightened men, that the subject is of too grave and important a nature to be so lightly disposed of; and it has accordingly ceased to be the subject of idle gossip or table-talk, and is rarely mentioned, except with the seriousness due to rational science; and, in proportion as it is examined in this spirit, the progress and diffusion proceed, unobtrusively, no doubt, but with the steady certainty characteristick of truth."

We have seen that the regular and systematick opposition to phrenology, as a science, which for years after its first introduction to the attention of mankind, was in perpetual and high-wrought activity, has finally succumbed to the combined weight of observed facts and legitimate deductions. It is true that an occasional article, intended to call in question the settled truths of the science, still finds its way to the reading community, through the publick press; but these, in no instance, bear any evident impress of their author's intelligence, upon the subject of which they treat; and it may, indeed, be deemed a remarkable fact that, in

defence of a science of so recent introduction, there should be arrayed so proud an assemblage of confessedly intellectual and cultivated defenders, while there is no where to be found, in the ranks of its opponents, a single champion who is at once worthy and ambitious to break a lance with any of these. The contest, then, for the establishment of phrenology, is past: the decisive battle has been fought, and phrenology has signally triumphed. "The entire day of actual war is gone by; and the morning of another day has opened on us, when that which has been gained in strife is to be employed in peace, for the benefit of our race." * We speak here of its principles only: yet, because these are established, let none suppose the whole has been thereby accomplished. In the earrying out of the details of phrenology - in the development and application of the philosophy of the science - there remains much - very much yet to be achieved; and that task is one requiring the best efforts of the ablest heads and the readiest pens. Its general influence, upon all the multiplied ramifications of social intercourse - its action and its benefitting agency upon the mass, is yet to be established. It is not until it shall have displaced, in its onward course, all that is false

^{*} Professor Caldwell.

and unreal in the older systems of "Mental Philosophy" that the aggregate of nations will be favourably affected by it. When the fatal errours in what we now technically designate "cducation" shall have been removed by its light, and physical organization shall no longer be deranged or destroyed by misapplied and irrational efforts at mental cultivation efforts at open war with the organick laws of our being - when, from a knowledge and just appreciation of the manner of mental manifestation, individual effort, on the part of each pupil shall be directed only in those channels in which the highest possible degree of desirable success, of which that pupil is capable, shall be rendered certain; when such knowledge and appreciation shall have penetrated the halls of legislation, and so reformed prevailing criminal codes as that deeds, under their sanction and authority, which not only humanity but even justice shudders to detail, are no longer perpetrated: in short, when the true distinction between ability and disability, and misfortune and guilt shall have become generally established, through the eradication of existing errours, then will the full value of the true philosophy of mind be realized by mankind. To effect this, however, is no trivial work. "On the contrary, it is a mighty one, before the period of whose completion mind must operate to great effect, and years and ages, perhaps whole centuries.

must yet clapse." To this gigantick task it is the duty of every phrenologist to bring the best efforts at his command; to the end that we may, at the earliest possible moment, enable the human family, at large, to enjoy the rich and valuable fruits which the science is destined to yield, by bringing man to a more intimate and just acquaintance with himself, and with the relative conditions of his being.



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